GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: August 5, 2004, 15:34:34 ; Search time 848 Seconds
(without alignments)
3.867 Million cell updates/sec

Title: us-10-664-775-1
Perfect score: 2715
Sequence: 1 ctgcaggaagaggcgacagg.....ttgtaattctaggtgctgat 2715

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 0.5

Searched: 1439 seqs, 603848 residues

Total number of hits satisfying chosen parameters: 2878

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 250 summaries

Database : rgedb:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
c	1	44.7	1.6	289	1	AR162089	ACCESSION:AR162089
c	2	44.7	1.6	289	1	AR166614	ACCESSION:AR166614
c	3	43	1.6	2422	1	AR030786	ACCESSION:AR030786
c	4	43	1.6	2422	1	AR045090	ACCESSION:AR045090
c	5	43	1.6	2422	1	AR052946	ACCESSION:AR052946
c	6	43	1.6	2422	1	AR122899	ACCESSION:AR122899
c	7	43	1.6	2422	1	AR127821	ACCESSION:AR127821
c	8	43	1.6	2462	1	AR095304	ACCESSION:AR095304
c	9	43	1.6	2462	1	AR103988	ACCESSION:AR103988
c	10	43	1.6	2462	1	AX335083	ACCESSION:AX335083
c	11	43	1.6	2462	1	AX409604	ACCESSION:AX409604
c	12	43	1.6	2462	1	HUMFVII	ACCESSION:M13232
c	13	43	1.6	2483	1	E01076	ACCESSION:E01076
c	14	43	1.6	2483	1	I07990	ACCESSION:I07990
c	15	41.6	1.5	2177	1	E01075	ACCESSION:E01075
c	16	41.6	1.5	2438	1	I07991	ACCESSION:I07991
c	17	37.4	1.4	1573	1	BC040125	ACCESSION:BC040125
	18	32.4	1.2	300	1	BD211952	ACCESSION:BD211952
	19	31.3	1.2	364	1	AR425705	ACCESSION:AR425705
	20	31.3	1.2	364	1	BD121258	ACCESSION:BD121258
c	21	28	1.0	1403	1	BC009726	ACCESSION:BC009726
c	22	27.2	1.0	1792	1	BC034377	ACCESSION:BC034377
c	23	25.2	0.9	1843	1	AR390799	ACCESSION:AR390799
c	24	25.2	0.9	1843	1	AX411026	ACCESSION:AX411026
c	25	25.2	0.9	1843	1	HSPROTC	ACCESSION:X02750
c	26	24.4	0.9	251	1	AY083553	ACCESSION:AY083553
	27	24.4	0.9	289	1	AR162089	ACCESSION:AR162089
	28	24.4	0.9	289	1	AR166614	ACCESSION:AR166614
c	29	24	0.9	1499	1	MUSCP	ACCESSION:D10445
c	30	24	0.9	1580	1	AF318182	ACCESSION:AF318182
c	31	24	0.9	1603	1	BC013896	ACCESSION:BC013896
	32	23.8	0.9	394	1	AX839180	ACCESSION:AX839180
	33	23.8	0.9	868	1	BD124660	ACCESSION:BD124660
	34	23.8	0.9	868	1	BD126609	ACCESSION:BD126609
c	35	23.6	0.9	1671	1	AY040345	ACCESSION:AY040345
c	36	23	0.8	364	1	AR425705	ACCESSION:AR425705
c	37	23	0.8	364	1	BD121258	ACCESSION:BD121258
	38	23	0.8	1329	1	AF465274	ACCESSION:AF465274
c	39	23	0.8	1507	1	AX774765	ACCESSION:AX774765
c	40	23	0.8	1507	1	HUMFACX	ACCESSION:M57285
c	41	23	0.8	1514	1	AF191307	ACCESSION:AF191307
c	42	22.8	0.8	200	1	AX395271	ACCESSION:AX395271
c	43	22.8	0.8	210	1	AB062458S3	ACCESSION:AB062462
c	44	22.8	0.8	210	1	AB062459S3	ACCESSION:AB062463
	45	22.4	0.8	252	1	HSU29534	ACCESSION:U29534
	46	22.4	0.8	255	1	HSU59442	ACCESSION:U59442
	47	22.4	0.8	260	1	HUMMHCD21A	ACCESSION:M84617
	48	22.4	0.8	285	1	HUMDPB1II	ACCESSION:L00599
	49	22.4	0.8	291	1	AF336229	ACCESSION:AF336229
	50	22.2	0.8	1341	1	AF532184	ACCESSION:AF532184
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	52	22	0.8	121	1	AX265078	ACCESSION:AX265078
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	54	22	0.8	121	1	AX265082	ACCESSION:AX265082
c	55	22	0.8	121	1	AX265085	ACCESSION:AX265085
	56	22	0.8	121	1	AX265086	ACCESSION:AX265086
c	57	22	0.8	121	1	AX265089	ACCESSION:AX265089
	58	22	0.8	121	1	AX265090	ACCESSION:AX265090
c	59	22	0.8	121	1	AX265093	ACCESSION:AX265093
	60	22	0.8	121	1	AX265094	ACCESSION:AX265094
c	61	22	0.8	121	1	AX265073	ACCESSION:AX265073
	62	22	0.8	121	1	AX265074	ACCESSION:AX265074
c	63	22	0.8	193	1	HUMKALR4	ACCESSION:M33108
c	64	22	0.8	240	1	HUMFIXG3	ACCESSION:K02050
c	65	22	0.8	385	1	AX892787	ACCESSION:AX892787
c	66	22	0.8	385	1	BD028320	ACCESSION:BD028320
c	67	22	0.8	409	1	AX839163	ACCESSION:AX839163
	68	21.8	0.8	274	1	AF306920	ACCESSION:AF306920
c	69	21.6	0.8	786	1	AX375740	ACCESSION:AX375740
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c	73	21.6	0.8	1020	1	AX823252	ACCESSION:AX823252
c	74	21.6	0.8	1378	1	AR410811	ACCESSION:AR410811
c	75	21.6	0.8	1378	1	AX697671	ACCESSION:AX697671
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c	77	21.6	0.8	1378	1	BD172441	ACCESSION:BD172441
c	78	21.6	0.8	1378	1	BD172760	ACCESSION:BD172760
c	79	21.6	0.8	1378	1	BD173079	ACCESSION:BD173079
c	80	21.6	0.8	1378	1	BD173398	ACCESSION:BD173398
c	81	21.6	0.8	1378	1	BD175432	ACCESSION:BD175432
c	82	21.6	0.8	1378	1	AY358396	ACCESSION:AY358396
c	83	21.6	0.8	1500	1	AF003200	ACCESSION:AF003200
c	84	21.6	0.8	1869	1	BC061149	ACCESSION:BC061149
c	85	21.6	0.8	6098	1	AX565990	ACCESSION:AX565990
c	86	21.4	0.8	244	1	AY226143	ACCESSION:AY226143
	87	21.4	0.8	328	1	AX839181	ACCESSION:AX839181
c	88	21.4	0.8	1129	1	AX464088	ACCESSION:AX464088
c	89	21.4	0.8	1129	1	AY359106	ACCESSION:AY359106
	90	21.4	0.8	6098	1	AX565990	ACCESSION:AX565990
c	91	21.2	0.8	121	1	AX265101	ACCESSION:AX265101
	92	21.2	0.8	121	1	AX265102	ACCESSION:AX265102
c	93	21.2	0.8	121	1	AX265097	ACCESSION:AX265097
	94	21.2	0.8	121	1	AX265098	ACCESSION:AX265098
c	95	21.2	0.8	229	1	AR306919	ACCESSION:AR306919
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	97	21.2	0.8	302	1	HSNTCH09	ACCESSION:AF058889
	98	21.2	0.8	302	1	ALRSAA	ACCESSION:X73827
c	99	21.2	0.8	302	1	BTA271156	ACCESSION:AJ271156
c	100	21.2	0.8	1541	1	BC046125	ACCESSION:BC046125
c	101	21	0.8	267	1	BD060364	ACCESSION:BD060364
	102	21	0.8	1722	1	AF515269	ACCESSION:AF515269
c	103	20.8	0.8	484	1	RATCFX	ACCESSION:D21215
	104	20.6	0.8	341	1	AX524243	ACCESSION:AX524243
	105	20.6	0.8	341	1	AX552981	ACCESSION:AX552981
c	106	20.6	0.8	1206	1	E63001	ACCESSION:E63001

c 107	20.6	0.8	1206	1	E63002	ACCESSION:E63002
c 108	20.6	0.8	1221	1	E62997	ACCESSION:E62997
c 109	20.6	0.8	1221	1	E62998	ACCESSION:E62998
c 110	20.6	0.8	1221	1	E62999	ACCESSION:E62999
c 111	20.6	0.8	1221	1	E63000	ACCESSION:E63000
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c 113	20.6	0.8	1440	1	AR112969	ACCESSION:AR112969
c 114	20.6	0.8	1440	1	I19358	ACCESSION:I19358
c 115	20.6	0.8	1440	1	I19360	ACCESSION:I19360
c 116	20.6	0.8	1440	1	BD194674	ACCESSION:BD194674
117	20.4	0.8	223	1	AX908508	ACCESSION:AX908508
118	20.4	0.8	223	1	BD044041	ACCESSION:BD044041
119	20.4	0.8	280	1	AF306917	ACCESSION:AF306917
120	20.4	0.8	280	1	AF306913	ACCESSION:AF306913
121	20.4	0.8	280	1	AF306914	ACCESSION:AF306914
122	20.4	0.8	280	1	AF306915	ACCESSION:AF306915
123	20.4	0.8	280	1	AF306919	ACCESSION:AF306919
124	20.4	0.8	383	1	AF266240	ACCESSION:AF266240
c 125	20.4	0.8	394	1	AX839180	ACCESSION:AX839180
126	20.4	0.8	1293	1	AF465275	ACCESSION:AF465275
c 127	20.4	0.8	1416	1	AF465269	ACCESSION:AF465269
128	20.4	0.8	1440	1	AR112953	ACCESSION:AR112953
129	20.4	0.8	1440	1	AR112969	ACCESSION:AR112969
130	20.4	0.8	1440	1	I19358	ACCESSION:I19358
131	20.4	0.8	1440	1	I19360	ACCESSION:I19360
132	20.4	0.8	1440	1	BD194674	ACCESSION:BD194674
c 133	20.4	0.8	2072	1	AF272774	ACCESSION:AF272774
c 134	20.4	0.8	2078	1	AF272773	ACCESSION:AF272773
135	20.4	0.8	2462	1	AR095304	ACCESSION:AR095304
136	20.4	0.8	2462	1	AR103988	ACCESSION:AR103988
137	20.4	0.8	2462	1	AX335083	ACCESSION:AX335083
138	20.4	0.8	2462	1	AX409604	ACCESSION:AX409604
139	20.4	0.8	2462	1	HUMFVII	ACCESSION:M13232
140	20.4	0.8	2483	1	E01076	ACCESSION:E01076
141	20.4	0.8	2483	1	I07990	ACCESSION:I07990
c 142	20.2	0.7	183	1	AY155152	ACCESSION:AY155152
c 143	20.2	0.7	214	1	AB083386	ACCESSION:AB083386
c 144	20.2	0.7	214	1	AB084901	ACCESSION:AB084901
c 145	20.2	0.7	227	1	AY022473	ACCESSION:AY022473
146	20.2	0.7	227	1	AY023221	ACCESSION:AY023221
147	20.2	0.7	271	1	AX098472	ACCESSION:AX098472
c 148	20.2	0.7	272	1	HUMPROS01	ACCESSION:M36551 J
c 149	20.2	0.7	352	1	HUMPS02	ACCESSION:M57841 J
150	20.2	0.7	537	1	AX342934	ACCESSION:AX342934
c 151	20.2	0.7	885	1	AR108139	ACCESSION:AR108139
c 152	20.2	0.7	1543	1	AX401899	ACCESSION:AX401899
c 153	20.2	0.7	1543	1	RNPROC	ACCESSION:X64336 S
c 154	20	0.7	855	1	AF011899	ACCESSION:AF011899
155	20	0.7	1130	1	AR234337	ACCESSION:AR234337
156	20	0.7	1142	1	AR219285	ACCESSION:AR219285
157	20	0.7	1166	1	AR221273	ACCESSION:AR221273
158	20	0.7	1169	1	AR219284	ACCESSION:AR219284
c 159	20	0.7	1722	1	AF515269	ACCESSION:AF515269
160	19.8	0.7	249	1	HUMDPB1A	ACCESSION:M77674
161	19.8	0.7	249	1	HUMDPBA	ACCESSION:D10478
162	19.8	0.7	249	1	HUMDPBB	ACCESSION:D10479
163	19.8	0.7	249	1	HUMMHDPBH	ACCESSION:M23680
c 164	19.8	0.7	254	1	AX587861	ACCESSION:AX587861
165	19.8	0.7	256	1	HUMMHDP1H	ACCESSION:M62333
166	19.8	0.7	257	1	AF180970	ACCESSION:AF180970
167	19.8	0.7	264	1	HUMDPB1KT	ACCESSION:D10882
c 168	19.8	0.7	268	1	HSLKB1PJ7	ACCESSION:AF055326
169	19.8	0.7	283	1	AF336224	ACCESSION:AF336224
170	19.8	0.7	285	1	AF492638	ACCESSION:AF492638
171	19.8	0.7	285	1	HUMMHDPBZ	ACCESSION:M83912
c 172	19.8	0.7	384	1	BD095271	ACCESSION:BD095271
c 173	19.8	0.7	394	1	AX814618	ACCESSION:AX814618
c 174	19.8	0.7	439	1	AX277349	ACCESSION:AX277349
c 175	19.8	0.7	439	1	AX277375	ACCESSION:AX277375
176	19.8	0.7	535	1	DLA6882	ACCESSION:AJ006882
177	19.8	0.7	556	1	BV036036	ACCESSION:BV036036
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c 179	19.8	0.7	873	1	HUMCFIX	ACCESSION:M35672
c 180	19.8	0.7	1850	1	MMU44795	ACCESSION:U44795
181	19.6	0.7	355	1	G32113	ACCESSION:G32113
c 182	19.6	0.7	484	1	HAMCFX	ACCESSION:D21216
183	19.6	0.7	596	1	AX193364	ACCESSION:AX193364
184	19.6	0.7	609	1	AX763043	ACCESSION:AX763043
c 185	19.6	0.7	882	1	AX675583	ACCESSION:AX675583
c 186	19.6	0.7	1142	1	AR219285	ACCESSION:AR219285
c 187	19.6	0.7	1161	1	AX675581	ACCESSION:AX675581
c 188	19.6	0.7	1169	1	AR219284	ACCESSION:AR219284
189	19.6	0.7	1221	1	E62999	ACCESSION:E62999
c 190	19.6	0.7	1373	1	BOVPBC	ACCESSION:K02435
191	19.6	0.7	1558	1	OCU49933	ACCESSION:U49933
192	19.6	0.7	2072	1	AF272774	ACCESSION:AF272774
193	19.4	0.7	177	1	AR109618	ACCESSION:AR109618
194	19.4	0.7	177	1	AR150638	ACCESSION:AR150638
195	19.4	0.7	177	1	E16187	ACCESSION:E16187
196	19.4	0.7	177	1	E27213	ACCESSION:E27213
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198	19.4	0.7	177	1	AR300928	ACCESSION:AR300928
199	19.4	0.7	204	1	AR109885	ACCESSION:AR109885
200	19.4	0.7	204	1	AR150703	ACCESSION:AR150703
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c 202	19.4	0.7	290	1	AX839191	ACCESSION:AX839191
203	19.4	0.7	352	1	HUMPS02	ACCESSION:M57841 J
c 204	19.4	0.7	471	1	DOGA2	ACCESSION:D43751
c 205	19.4	0.7	823	1	SHPFIXA	ACCESSION:M26233
c 206	19.4	0.7	829	1	BC061135	ACCESSION:BC061135
207	19.4	0.7	1027	1	AX375294	ACCESSION:AX375294
c 208	19.4	0.7	1126	1	AR095306	ACCESSION:AR095306
c 209	19.4	0.7	1126	1	AR103990	ACCESSION:AR103990
c 210	19.4	0.7	1126	1	HUMFX	ACCESSION:K01886
c 211	19.4	0.7	1332	1	AF321182	ACCESSION:AF321182
c 212	19.4	0.7	1404	1	A93124	ACCESSION:A93124
c 213	19.4	0.7	1414	1	HUMCFX	ACCESSION:M22613
214	19.4	0.7	1551	1	AX147505	ACCESSION:AX147505
215	19.4	0.7	1850	1	MMU44795	ACCESSION:U44795
216	19.4	0.7	1869	1	BC061149	ACCESSION:BC061149
217	19.2	0.7	281	1	MUSACROS02	ACCESSION:M96427 M
218	19.2	0.7	368	1	AX524801	ACCESSION:AX524801
219	19.2	0.7	368	1	AX553539	ACCESSION:AX553539
c 220	19.2	0.7	471	1	GOTA3	ACCESSION:D43752
c 221	19.2	0.7	596	1	BV094002	ACCESSION:BV094002
222	19.2	0.7	826	1	RABTHRO	ACCESSION:M81396
223	19.2	0.7	1302	1	AF465270	ACCESSION:AF465270
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c 225	19.2	0.7	1357	1	AX211661	ACCESSION:AX211661
c 226	19.2	0.7	1558	1	OCU49933	ACCESSION:U49933
c 227	19.2	0.7	1619	1	OCU77477	ACCESSION:U77477 S
228	19	0.7	224	1	AY022788	ACCESSION:AY022788
229	19	0.7	230	1	SSU73464	ACCESSION:U73464
230	19	0.7	244	1	HSCRYBB2S3	ACCESSION:U72402
c 231	19	0.7	741	1	HUMMA	ACCESSION:D45417
c 232	19	0.7	741	1	E01617	ACCESSION:E01617
c 233	19	0.7	744	1	E09633	ACCESSION:E09633
c 234	19	0.7	790	1	E15808	ACCESSION:E15808
c 235	19	0.7	804	1	AF312826	ACCESSION:AF312826
c 236	19	0.7	821	1	BC030238	ACCESSION:BC030238
c 237	19	0.7	850	1	AX333266	ACCESSION:AX333266
c 238	19	0.7	850	1	HSTRYIVB	ACCESSION:X71345
c 239	19	0.7	853	1	HSTRPIV	ACCESSION:X72781
240	19	0.7	1383	1	E01914	ACCESSION:E01914
c 241	18.8	0.7	302	1	G06930	ACCESSION:G06930
c 242	18.8	0.7	340	1	AR263850	ACCESSION:AR263850
c 243	18.8	0.7	340	1	AR263851	ACCESSION:AR263851
244	18.8	0.7	352	1	DMU58868	ACCESSION:U58868
c 245	18.8	0.7	596	1	AX193364	ACCESSION:AX193364
246	18.8	0.7	786	1	AX375740	ACCESSION:AX375740
247	18.8	0.7	882	1	AX675583	ACCESSION:AX675583
248	18.8	0.7	944	1	AX375744	ACCESSION:AX375744
249	18.8	0.7	1161	1	AX675581	ACCESSION:AX675581
c 250	18.8	0.7	1505	1	AX523898	ACCESSION:AX523898

ALIGNMENTS

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RESULT 1
AR162089/c
LOCUS       AR162089                289 bp    DNA     linear   PAT 17-OCT-2001
DEFINITION  Sequence 17 from patent US 6258558.
ACCESSION   AR162089
VERSION     AR162089.1  GI:16229155
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 289)
  AUTHORS   Szostak,J.W., Roberts,R.W. and Liu,R.
  TITLE     Method for selection of proteins using RNA-protein fusions
  JOURNAL   Patent: US 6258558-A 17 10-JUL-2001;
FEATURES             Location/Qualifiers
     source          1. .289
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                     /mol_type="unassigned DNA"

  Query Match             1.6%;  Score 44.7;  DB 1;  Length 289;
  Best Local Similarity   6.8%;  Pred. No. 2.3e-05;
  Matches   15;  Conservative  110;  Mismatches   96;  Indels    1;  Gaps    1;

Qy       1549 AAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1608
Db        228 AYGYCYTYGYSYNYNYSYNYNYSYNYNYSYNYNYSYNYNYSYNYNYSYNYNYSY 169

Qy       1609 GTGTGTCTGTGTCTGTGT-CTTGTGTGTCTGTGTTCTCTCCCCTCTTTTGATTTTTGGCC 1667
Db        168 NYNYSYNYNYSYNYNYSYNYNYSYNYNYSYNYNYSYNYNYSYNYNYSYNYNYSY 109

Qy       1668 TGGAATTATTTATTATTCATATTTTCTTGAATGTGGGTAACATCTTTAGATTGAAGTTTT 1727
Db         108 NYNYSYNYNYSYNYNYSYNYNYSYNYNYSYNYNYSYNYNYSYNYNYSYNYNYCYAYTYTY 49

Qy       1728 TCTCCTAGCCTTCTTTAGGTCTGCATTTGAAGATAGATATTC 1769
Db          48 GYTYAYAYTYTYGYTYAYAYAYTYAYGYTYAYAYTYTYGYTY 7


RESULT 2
AR166614/c
LOCUS       AR166614                289 bp    DNA     linear   PAT 17-OCT-2001
DEFINITION  Sequence 17 from patent US 6281344.
ACCESSION   AR166614
VERSION     AR166614.1  GI:16242009
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 289)
  AUTHORS   Szostak,J.W., Roberts,R.W. and Liu,R.
  TITLE     Nucleic acid-protein fusion molecules and libraries
  JOURNAL   Patent: US 6281344-A 17 28-AUG-2001;
FEATURES             Location/Qualifiers
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                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.6%;  Score 44.7;  DB 1;  Length 289;
  Best Local Similarity   6.8%;  Pred. No. 2.3e-05;
  Matches   15;  Conservative  110;  Mismatches   96;  Indels    1;  Gaps    1;

Qy       1549 AAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1608
Db        228 AYGYCYTYGYSYNYNYSYNYNYSYNYNYSYNYNYSYNYNYSYNYNYSYNYNYSY 169

Qy       1609 GTGTGTCTGTGTCTGTGT-CTTGTGTGTCTGTGTTCTCTCCCCTCTTTTGATTTTTGGCC 1667
Db        168 NYNYSYNYNYSYNYNYSYNYNYSYNYNYSYNYNYSYNYNYSYNYNYSYNYNYSY 109

Qy       1668 TGGAATTATTTATTATTCATATTTTCTTGAATGTGGGTAACATCTTTAGATTGAAGTTTT 1727
Db         108 NYNYSYNYNYSYNYNYSYNYNYSYNYNYSYNYNYSYNYNYSYNYNYSYNYNYCYAYTYTY 49

Qy       1728 TCTCCTAGCCTTCTTTAGGTCTGCATTTGAAGATAGATATTC 1769
Db          48 GYTYAYAYTYTYGYTYAYAYAYTYAYGYTYAYAYTYTYGYTY 7


RESULT 3
AR030786/c
LOCUS       AR030786                2422 bp    DNA     linear   PAT 29-SEP-1999
DEFINITION  Sequence 1 from patent US 5861374.
ACCESSION   AR030786
VERSION     AR030786.1  GI:5944000
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 2422)
  AUTHORS   Berkner,K.L., Petersen,L.Christian. and Hart,C.E.
  TITLE     Modified Factor VII
  JOURNAL   Patent: US 5861374-A 1 19-JAN-1999;
FEATURES             Location/Qualifiers
     source          1. .2422
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.6%;  Score 43;  DB 1;  Length 2422;
  Best Local Similarity   58.0%;  Pred. No. 8.7e-05;
  Matches   76;  Conservative    0;  Mismatches   55;  Indels    0;  Gaps    0;

Qy       1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
Db       1946 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1887

Qy       1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613
Db       1886 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1827

Qy       1614 TCTGTGTCTGT 1624
Db       1826 TCCATGTGTGT 1816


RESULT 4
AR045090/c
LOCUS       AR045090                2422 bp    DNA     linear   PAT 29-SEP-1999
DEFINITION  Sequence 1 from patent US 5817788.
ACCESSION   AR045090
VERSION     AR045090.1  GI:5966555
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 2422)
  AUTHORS   Berkner,K.L., Petersen,L.Christian., Hart,C.E., Hedner,U. and
            Bregengaard,C.
  TITLE     Modified factor VII
  JOURNAL   Patent: US 5817788-A 1 06-OCT-1998;
FEATURES             Location/Qualifiers
     source          1. .2422
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.6%;  Score 43;  DB 1;  Length 2422;
  Best Local Similarity   58.0%;  Pred. No. 8.7e-05;
  Matches   76;  Conservative    0;  Mismatches   55;  Indels    0;  Gaps    0;

Qy       1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
Db       1946 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1887
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Qy       1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613
             ||||||  |  |||||||||  | | | ||||||||||  |  | ||||||||||||||
Db       1886 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1827

Qy       1614 TCTGTGTCTGT 1624
             ||  |||  |||
Db       1826 TCCATGTGTGT 1816
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RESULT 5
AR052946/c
LOCUS AR052946 2422 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 1 from patent US 5833982.
ACCESSION AR052946
VERSION AR052946.1 GI:5977808
KEYWORDS .
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.
REFERENCE 1 (bases 1 to 2422)
AUTHORS Berkner,K.L., Petersen,L.Christian., Hart,C.E., Hedner,U. and Bregengaard,C.
TITLE Modified factor VII
JOURNAL Patent: US 5833982-A 1 10-NOV-1998;
FEATURES Location/Qualifiers
source 1. .2422
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 1.6%; Score 43; DB 1; Length 2422;
Best Local Similarity 58.0%; Pred. No. 8.7e-05;
Matches 76; Conservative 0; Mismatches 55; Indels 0; Gaps 0;

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Qy       1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
             |||  |  |  | |   || |      | |  |  | |  |||||     |   |  ||
Db       1946 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1887

Qy       1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613
             ||||||  |  |||||||||  | | | ||||||||||  |  | ||||||||||||||
Db       1886 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1827

Qy       1614 TCTGTGTCTGT 1624
             ||  |||  |||
Db       1826 TCCATGTGTGT 1816
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RESULT 6
AR122899/c
LOCUS AR122899 2422 bp DNA linear PAT 16-MAY-2001
DEFINITION Sequence 1 from patent US 6168789.
ACCESSION AR122899
VERSION AR122899.1 GI:14107865
KEYWORDS .
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.
REFERENCE 1 (bases 1 to 2422)
AUTHORS Berkner,K.L., Petersen,L.Christian., Hart,C.E., Hedner,U. and Bregengaard,C.
TITLE Modified factor VII
JOURNAL Patent: US 6168789-A 1 02-JAN-2001;
FEATURES Location/Qualifiers
source 1. .2422
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 1.6%; Score 43; DB 1; Length 2422;
Best Local Similarity 58.0%; Pred. No. 8.7e-05;
Matches 76; Conservative 0; Mismatches 55; Indels 0; Gaps 0;

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Qy       1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
             |||  |  |  | |   || |      | |  |  | |  |||||     |   |  ||
Db       1946 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1887

Qy       1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613
             ||||||  |  |||||||||  | | | ||||||||||  |  | ||||||||||||||
Db       1886 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1827

Qy       1614 TCTGTGTCTGT 1624
             ||  |||  |||
Db       1826 TCCATGTGTGT 1816
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RESULT 7
AR127821/c
LOCUS AR127821 2422 bp DNA linear PAT 16-MAY-2001
DEFINITION Sequence 1 from patent US 6183743.
ACCESSION AR127821
VERSION AR127821.1 GI:14115483
KEYWORDS .
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.
REFERENCE 1 (bases 1 to 2422)
AUTHORS Hart,C.E., Petersen,L.C., Hedner,U. and Rasmussen,M.E.
TITLE Modified factor VII
JOURNAL Patent: US 6183743-A 1 06-FEB-2001;
FEATURES Location/Qualifiers
source 1. .2422
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 1.6%; Score 43; DB 1; Length 2422;
Best Local Similarity 58.0%; Pred. No. 8.7e-05;
Matches 76; Conservative 0; Mismatches 55; Indels 0; Gaps 0;

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Qy       1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
             |||  |  |  | |   || |      | |  |  | |  |||||     |   |  ||
Db       1946 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1887

Qy       1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613
             ||||||  |  |||||||||  | | | ||||||||||  |  | ||||||||||||||
Db       1886 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1827

Qy       1614 TCTGTGTCTGT 1624
             ||  |||  |||
Db       1826 TCCATGTGTGT 1816
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RESULT 8
AR095304/c
LOCUS AR095304 2462 bp DNA linear PAT 08-SEP-2000
DEFINITION Sequence 25 from patent US 6004555.
ACCESSION AR095304
VERSION AR095304.1 GI:10023060
KEYWORDS .
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.
REFERENCE 1 (bases 1 to 2462)
AUTHORS Thorpe,P.E. and Edgington,T.S.
TITLE Methods for the specific coagulation of vasculature
JOURNAL Patent: US 6004555-A 25 21-DEC-1999;
FEATURES Location/Qualifiers
source 1. .2462
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 1.6%; Score 43; DB 1; Length 2462;
Best Local Similarity 58.0%; Pred. No. 8.7e-05;
Matches 76; Conservative 0; Mismatches 55; Indels 0; Gaps 0;

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Qy       1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
             |||  |  |  | |   || |      | |  |  | |  |||||     |   |  ||
Db       2007 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1948
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Qy       1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613
             ||||||  |  |||||||||  | | | ||||||||||  |  | ||||||||||||||
Db       1947 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1888

Qy       1614 TCTGTGTCTGT 1624
             ||  ||| |||
Db       1887 TCCATGTGTGT 1877
```

RESULT 9
AR103988/c
LOCUS AR103988 2462 bp DNA linear PAT 14-FEB-2001
DEFINITION Sequence 25 from patent US 6093399.
ACCESSION AR103988
VERSION AR103988.1 GI:12816696
KEYWORDS .
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.
REFERENCE 1 (bases 1 to 2462)
AUTHORS Thorpe,P.E. and Edgington,T.S.
TITLE Methods and compositions for the specific coagulation of vasculature
JOURNAL Patent: US 6093399-A 25 25-JUL-2000;
FEATURES Location/Qualifiers
source 1. .2462
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 1.6%; Score 43; DB 1; Length 2462;
Best Local Similarity 58.0%; Pred. No. 8.7e-05;
Matches 76; Conservative 0; Mismatches 55; Indels 0; Gaps 0;

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Qy       1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
             |||  | |  | |   || |      | |  |  | |   |||||     |    |  ||
Db       2007 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1948

Qy       1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613
             ||||||  |  |||||||||  | | | ||||||||||  |  | ||||||||||||||
Db       1947 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1888

Qy       1614 TCTGTGTCTGT 1624
             ||  ||| |||
Db       1887 TCCATGTGTGT 1877
```

RESULT 10
AX335083/c
LOCUS AX335083 2462 bp DNA linear PAT 09-JAN-2002
DEFINITION Sequence 5592 from Patent WO0194629.
ACCESSION AX335083
VERSION AX335083.1 GI:18125802
KEYWORDS .
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Young,P.E., Augustus,M., Carter,K.C., Ebner,R., Endress,G., Horrigan,S., Soppet,D.R. and Weaver,Z.
TITLE Cancer gene determination and therapeutic screening using signature gene sets
JOURNAL Patent: WO 0194629-A 5592 13-DEC-2001;
Avalon Pharmaceuticals (US)
FEATURES Location/Qualifiers
source 1. .2462
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 1.6%; Score 43; DB 1; Length 2462;
Best Local Similarity 58.0%; Pred. No. 8.7e-05;
Matches 76; Conservative 0; Mismatches 55; Indels 0; Gaps 0;

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Qy       1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
             |||  | |  | |   || |      | |  |  | |   |||||     |    |  ||
Db       2007 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1948

Qy       1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613
             ||||||  |  |||||||||  | | | ||||||||||  |  | ||||||||||||||
Db       1947 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1888

Qy       1614 TCTGTGTCTGT 1624
             ||  ||| |||
Db       1887 TCCATGTGTGT 1877
```

RESULT 11
AX409604/c
LOCUS AX409604 2462 bp DNA linear PAT 14-JUN-2002
DEFINITION Sequence 2251 from Patent WO0229103.
ACCESSION AX409604
VERSION AX409604.1 GI:21442309
KEYWORDS .
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Alvares,C., Horne,D., Peres-da-Silva,S. and Vockley,J.G.
TITLE Gene expression profiles in liver cancer
JOURNAL Patent: WO 0229103-A 2251 11-APR-2002;
GENE LOGIC INC (US)
FEATURES Location/Qualifiers
source 1. .2462
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
/note="EMBL/GenBank Accession No. M13232"

Query Match 1.6%; Score 43; DB 1; Length 2462;
Best Local Similarity 58.0%; Pred. No. 8.7e-05;
Matches 76; Conservative 0; Mismatches 55; Indels 0; Gaps 0;

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Qy       1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
             |||  | |  | |   || |      | |  |  | |   |||||     |    |  ||
Db       2007 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1948

Qy       1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613
             ||||||  |  |||||||||  | | | ||||||||||  |  | ||||||||||||||
Db       1947 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1888

Qy       1614 TCTGTGTCTGT 1624
             ||  ||| |||
Db       1887 TCCATGTGTGT 1877
```

RESULT 12
HUMFVII/c
LOCUS HUMFVII 2462 bp mRNA linear PRI 13-FEB-1996
DEFINITION Human factor VII serine protease precursor mRNA, complete cds, clone lambda-HVII2463.
ACCESSION M13232
VERSION M13232.1 GI:182799
KEYWORDS factor VII; serine protease; serum glycoprotein.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 2462)
AUTHORS Hagen,F.S., Gray,C.L., O'Hara,P.J., Grant,F.J., Saari,G.C., Woodbury,R.G., Hart,C.E., Insley,M., Kisiel,W., Kurachi,K. and Davie,E.W.
TITLE Characterization of a cDNA coding for human factor VII
JOURNAL Proc. Natl. Acad. Sci. U.S.A. 83 (8), 2412-2416 (1986)

```
  MEDLINE   86205965
   PUBMED   3486420
COMMENT     Original source text: Homo sapiens liver cDNA to mRNA.
            Draft entry and sequence in computer-readable form for [1] kindly
            provided by F.S.Hagen.
            [1] sequenced two alternatively spliced mRNAs that produced
            shortened signal peptides.  One is presented as factor VIIb below.
FEATURES             Location/Qualifiers
     source          1. .2462
                     /organism="Homo sapiens"
                     /mol_type="mRNA"
                     /db_xref="taxon:9606"
                     /tissue_type="liver"
     mRNA            <1. .2462
                     /product="FVIIa mRNA"
     CDS             36. .1436
                     /note="precursor for factor VIIa and b"
                     /codon_start=1
                     /product="coagulation factor VII"
                     /protein_id="AAA88040.1"
                     /db_xref="GI:182801"
                     /translation="MVSQALRLLCLLLGLQGCLAAGGVAKASGGETRDMPWKPGPHRV
                     FVTQEEAHGVLHRRRRANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWI
                     SYSDGDQCASSPCQNGGSCKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQ
                     YCSDHTGTKRSCRCHEGYSLLADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKV
                     CPKGECPWQVLLLVNGAQLCGGTLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEH
                     DGDEQSRRVAQVIIPSTYVPGTTNHDIALLRLHQPVVLTDHVVPLCLPERTFSERTLA
                     FVRFSLVSGWGQLLDRGATALELMVLNVPRLMTQDCLQQSRKVGDSPNITEYMFCAGY
                     SDGSKDSCKGDSGGPHATHYRGTWYLTGIVSWGQGCATVGHFGVYTRVSQYIEWLQKL
                     MRSEPRPGVLLRAPFP"
     sig_peptide     36. .215
                     /note="factor VIIa signal peptide"
     CDS             join(36. .99,166. .1436)
                     /note="preprofactor VIIb"
                     /codon_start=1
                     /protein_id="AAA88041.1"
                     /db_xref="GI:182800"
                     /translation="MVSQALRLLCLLLGLQGCLAAVFVTQEEAHGVLHRRRRANAFLE
                     ELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGSCKDQ
                     LQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSLLA
                     DGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG
                     TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGT
                     TNHDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALE
                     LMVLNVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRG
                     TWYLTGIVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP"
     sig_peptide     join(36. .99,166. .215)
                     /note="factor VIIb signal peptide"
     mat_peptide     216. .671
                     /product="coagulation factor VII"
                     /note="light chain"
     mat_peptide     672. .1433
                     /product="coagulation factor VII"
                     /note="heavy chain"
     exon            <36. .99
                     /note="preprofactor VIIb"
                     /number=1
     exon            100. .165
                     /note="alternate exon; putative"
     exon            166. .2462
                     /note="factor VIIb"
                     /number=2

  Query Match              1.6%;  Score 43;  DB 1;  Length 2462;
  Best Local Similarity   58.0%;  Pred. No. 8.7e-05;
  Matches   76;  Conservative    0;  Mismatches   55;  Indels    0;  Gaps    0;

Qy       1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
             ||| | | | |   || |       | | | | | |||||     |   | ||
Db       2007 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1948

Qy       1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613
              ||||||  |  |||||||||  | | | ||||||||||  |  | ||||||||||||||
Db       1947 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1888

Qy       1614 TCTGTGTCTGT 1624
              ||  |||  |||
Db       1887 TCCATGTGTGT 1877


RESULT 13
E01076/c
LOCUS       E01076                  2483 bp    RNA     linear   PAT 29-SEP-1997
DEFINITION  cDNA sequence of Factor VII fragment.
ACCESSION   E01076
VERSION     E01076.1  GI:2169335
KEYWORDS    JP 1987000283-A/2.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 2483)
  AUTHORS   Furederitsuku,E.H., Maaku,J.M., Shiyaaron,J.B., Kiyasuriin,E.B.,
            Maagaretsuto,W.I., Richiyaado,J.U. and Chiyaaruzu,E.G.
  TITLE     DNA ENCODING FACTOR VII
  JOURNAL   Patent: JP 1987000283-A 2 06-JAN-1987;
            HEMOJIENETEITSUKUSU INC NIPPON SODA CO LTD, NISSAN CHEM IND LTD,
            TOYO SODA MFG CO LTD
COMMENT     PN   JP 1987000283-A/2
            PD   06-JAN-1987
            PF   16-APR-1986 JP 1986087861
            PR   17-APR-1985 US 85    724311, 16-DEC-1985 US 85    810002 PI
            FUREDERITSUKU ESU HAAGEN, MAAKU JIEI MARII,
            PI   SHIYAARON JIEI BAZUBII,
            PI   KIYASURIIN ERU BAAKUNAA, MAAGARETSUTO WAI INSUREE, PI
            RICHIYAADO JII UTSUDOBERII, CHIYAARUZU ERU GUREI PC
            C12N15/00,A61K37/465,C12N5/00,C12N9/50,(C12N9/50,C12R1:91); CC
            strandedness: Double;
            CC   topology: Linear;
            CC   hypothetical: No;
            CC   anti-sense: No;
            CC   *source: library=cDNA library;
            CC   *source: clone=lambdaVII 2463;
            FH   Key             Location/Qualifiers
            FH
            FT   5'UTR           1. .35
            FT   sig_peptide     36. .215
            FT   CDS             216. .1436
            FT                   /product='factor VII'
            FT   3'UTR           1437. .2462
            FT   misc_recomb     2462. .<2480
            FT                   /note='polyA tail'.
FEATURES             Location/Qualifiers
     source          1. .2483
                     /organism="unidentified"
                     /mol_type="genomic RNA"
                     /db_xref="taxon:32644"

  Query Match              1.6%;  Score 43;  DB 1;  Length 2483;
  Best Local Similarity   58.0%;  Pred. No. 8.7e-05;
  Matches   76;  Conservative    0;  Mismatches   55;  Indels    0;  Gaps    0;

Qy       1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
             ||| | | | |   || |       | | | | | |||||     |   | ||
Db       2007 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1948

Qy       1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613
              ||||||  |  |||||||||  | | | ||||||||||  |  | ||||||||||||||
Db       1947 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1888

Qy       1614 TCTGTGTCTGT 1624
              ||  |||  |||
Db       1887 TCCATGTGTGT 1877


RESULT 14
I07990/c
LOCUS       I07990                  2483 bp    DNA     linear   PAT 02-DEC-1994
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```
DEFINITION  Sequence 3 from Patent EP 0200421.
ACCESSION   I07990
VERSION     I07990.1  GI:589296
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 2483)
  AUTHORS   Hagen,F.S., Murray,M.J., Busby,S.J., Berkner,K.L., Insley,M.Y.,
            Woodbury,R.G. and Gray,C.L.
  TITLE     Expression of factor VII and IX activities in mammalian cells
  JOURNAL   Patent: EP 0200421-A2 3 10-DEC-1986;
FEATURES             Location/Qualifiers
     source          1. .2483
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.6%;  Score 43;  DB 1;  Length 2483;
  Best Local Similarity   58.0%;  Pred. No. 8.7e-05;
  Matches   76;  Conservative    0;  Mismatches   55;  Indels    0;  Gaps    0;

Qy       1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
             |||  | |  | |   || |      | |  |  | |   |||||     |    |  ||
Db       2007 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1948

Qy       1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613
             ||||||  |  |||||||||  | | | ||||||||||  |  | ||||||||||||||
Db       1947 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1888

Qy       1614 TCTGTGTCTGT 1624
             ||  ||| |||
Db       1887 TCCATGTGTGT 1877


RESULT 15
E01075/c
LOCUS       E01075                  2177 bp    RNA     linear   PAT 29-SEP-1997
DEFINITION  cDNA sequence of factor VII fragment.
ACCESSION   E01075
VERSION     E01075.1  GI:2169334
KEYWORDS    JP 1987000283-A/1.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 2177)
  AUTHORS   Furederitsuku,E.H., Maaku,J.M., Shiyaaron,J.B., Kiyasuriin,E.B.,
            Maagaretsuto,W.I., Richiyaado,J.U. and Chiyaaruzu,E.G.
  TITLE     DNA ENCODING FACTOR VII
  JOURNAL   Patent: JP 1987000283-A 1 06-JAN-1987;
            HEMOJIENETEITSUKUSU INC NIPPON SODA CO LTD, NISSAN CHEM IND LTD,
            TOYO SODA MFG CO LTD
COMMENT     OS   Human (Homo sapiens)
            PN   JP 1987000283-A/1
            PD   06-JAN-1987
            PF   16-APR-1986 JP 1986087861
            PR   17-APR-1985 US 85    724311, 16-DEC-1985 US 85    810002 PI
            FUREDERITSUKU ESU HAAGEN, MAAKU JIEI MARII,
            PI   SHIYAARON JIEI BAZUBII,
            PI   KIYASURIIN ERU BAAKUNAA, MAAGARETSUTO WAI INSUREE, PI
            RICHIYAADO JII UTSUDOBERII, CHIYAARUZU ERU GUREI PC
            C12N15/00,A61K37/465,C12N5/00,C12N9/50,(C12N9/50,C12R1:91); CC
            strandedness: Double;
            CC   topology: Linear;
            CC   hypothetical: No;
            CC   anti-sense: No;
            CC   *source: tissue_type=Liver;
            CC   *source: library=cDNA library, lambdagt11 cDNA library; CC
            *source: clone=lambdaVII 2115, lambdaVII 1923; FH   Key
            Location/Qualifiers
            FH
            FT   CDS             13. .1128
            FT                   /product='factor VII peptide' FT
            polyA_signal    2106. .2111
            FT   exon            <1. .12
            FT   3'UTR           1129. .<2177.
FEATURES             Location/Qualifiers
     source          1. .2177
                     /organism="unidentified"
                     /mol_type="genomic RNA"
                     /db_xref="taxon:32644"

  Query Match             1.5%;  Score 41.6;  DB 1;  Length 2177;
  Best Local Similarity   57.8%;  Pred. No. 0.00021;
  Matches   74;  Conservative    0;  Mismatches   54;  Indels    0;  Gaps    0;

Qy       1516 GTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTGTGTGTGTGTGTGTGTGTGTGTG 1575
             ||||  |||  |||    |   | ||||||      || | | ||||||||  | ||||||
Db       1755 GTGTGCGTGCATTGGCATGTGCGTGCACTCCATGTGTATATCTGTGTGTGCATCTGTGTG 1696

Qy       1576 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTCTGTGTCTGTGTCTTGTGTGT 1635
             ||  | | | | |||| |||||  |  |||||| || ||           | | |||||
Db       1695 TGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTACTCTGTGTGACCATCTGTGT 1636

Qy       1636 CTGTGTTC 1643
              ||  | |
Db       1635 GTGCATCC 1628


RESULT 16
I07991/c
LOCUS       I07991                  2438 bp    DNA     linear   PAT 02-DEC-1994
DEFINITION  Sequence 6 from Patent EP 0200421.
ACCESSION   I07991
VERSION     I07991.1  GI:589297
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 2438)
  AUTHORS   Hagen,F.S., Murray,M.J., Busby,S.J., Berkner,K.L., Insley,M.Y.,
            Woodbury,R.G. and Gray,C.L.
  TITLE     Expression of factor VII and IX activities in mammalian cells
  JOURNAL   Patent: EP 0200421-A2 6 10-DEC-1986;
FEATURES             Location/Qualifiers
     source          1. .2438
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.5%;  Score 41.6;  DB 1;  Length 2438;
  Best Local Similarity   57.8%;  Pred. No. 0.00021;
  Matches   74;  Conservative    0;  Mismatches   54;  Indels    0;  Gaps    0;

Qy       1516 GTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTGTGTGTGTGTGTGTGTGTGTGTG 1575
             ||||  |||  |||    |   | ||||||      || | | ||||||||  | ||||||
Db       1995 GTGTGCGTGCATTGGCATGTGCGTGCACTCCATGTGTATATCTGTGTGTGCATCTGTGTG 1936

Qy       1576 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTCTGTGTCTGTGTCTTGTGTGT 1635
             ||  | | | | |||| |||||  |  |||||| || ||           | | |||||
Db       1935 TGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTACTCTGTGTGACCATCTGTGT 1876

Qy       1636 CTGTGTTC 1643
              ||  | |
Db       1875 GTGCATCC 1868


RESULT 17
BC040125/c
LOCUS       BC040125                1573 bp    mRNA    linear   PRI 26-NOV-2002
DEFINITION  Homo sapiens, similar to coagulation factor X, clone IMAGE:5764698,
            mRNA.
ACCESSION   BC040125
VERSION     BC040125.1  GI:25455627
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
```

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            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 1573)
  AUTHORS   Strausberg,R.
  TITLE     Direct Submission
  JOURNAL   Submitted (22-NOV-2002) National Institutes of Health, Mammalian
            Gene Collection (MGC), Cancer Genomics Office, National Cancer
            Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
            USA
  REMARK    NIH-MGC Project URL: http://mgc.nci.nih.gov
COMMENT     Contact: MGC help desk
            Email: cgapbs-r@mail.nih.gov
            Tissue Procurement: Life Technologies, Inc.
            cDNA Library Preparation: Life Technologies, Inc.
            cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
            DNA Sequencing by: Institute for Systems Biology
            http://www.systemsbiology.org
            contact: amadan@systemsbiology.org
            Anup Madan, Jessica Fahey, Erin Helton, Mark Ketteman, Anuradha
            Madan, Stephanie Rodrigues, Amy Sanchez and Michelle Whiting

            Clone distribution: MGC clone distribution information can be found
            through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
            Series: IRAK Plate: 84 Row: m Column: 9
            This clone was selected for full length sequencing because it
            passed the following selection criteria: matched mRNA gi: 9961350.
FEATURES             Location/Qualifiers
     source          1. .1573
                     /organism="Homo sapiens"
                     /mol_type="mRNA"
                     /db_xref="taxon:9606"
                     /clone="IMAGE:5764698"
                     /tissue_type="Brain, adult, 6 pooled whole brains"
                     /clone_lib="NIH_MGC_114"
                     /lab_host="DH10B"
                     /note="Vector: pCMV-SPORT6"

  Query Match             1.4%;  Score 37.4;  DB 1;  Length 1573;
  Best Local Similarity   51.5%;  Pred. No. 0.0028;
  Matches   86;  Conservative    0;  Mismatches   81;  Indels    0;  Gaps    0;

Qy       1954 TTTATATGTTAATTGGTCTTTTTTCCCTTGCATCTTTTAATATTCTTTCTTTGTTCTATA 2013
              ||| | | ||  ||  | ||||||   ||   | ||||  | || ||| ||| || | |
Db       1564 TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT 1505

Qy       2014 CTTTTAGTGATTTGATTATTATGCACTGTGGGGAGTTTCTTTTCCGGTCCAATCTATTTG 2073
              ||||  |  |||  || || |  | || |      | |  |   |   |   |||
Db       1504 TTTTTTTTTTTTTTTTTTTTTTGAGTGGGATCTCACTTTAATGGAGAGGACGTTATGAC 1445

Qy       2074 GTGTTTTGTATGCTTCTTGTACCTTGATAGGCATCTCTTTCTCAAGG 2120
              |      | |||  |||||  | | |  | ||  ||  || ||| ||
Db       1444 CTCCGGGGCATGGCTCTTGGCCTTGGGCAAGCCCCTGGTTTTCATGG 1398


RESULT 18
BD211952
LOCUS       BD211952                300 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Novel human genes and gene expression products ii.
ACCESSION   BD211952
VERSION     BD211952.1  GI:33021722
KEYWORDS    JP 2002519000-A/94.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 300)
  AUTHORS   Williams,L.T., Escobedo,J., Innis,M.A., Garcia,P.D., Klinger,J.S.,
            Reinhard,C., Giese,K., Randazzo,F., Kennedy,G.C., Pot,D.,
            Kassam,A., Lamson,G., Drmanac,R., Crkvenjakov,R., Dickson,M.,
            Drmanac,S., Labat,I., Leshkowitz,D., Kita,D., Garcia,V., Jones,L.W.
            and Crain,B.S.
  TITLE     Novel human genes and gene expression products ii
  JOURNAL   Patent: JP 2002519000-A 94 02-JUL-2002;
            CHIRON CORP,HYSEQ INC
COMMENT     OS   Homo sapiens (human)
            PN   JP 2002519000-A/94
            PD   02-JUL-2002
            PF   28-JAN-1999 JP 2000556580
            PR   28-JAN-1998 US    60/072910,24-FEB-1998 US    60/075954 PR
            31-MAR-1998 US    60/080114,03-APR-1998 US    60/080515 PR
            03-APR-1998 US    60/080666,21-OCT-1998 US    60/105234 PR
            28-OCT-1998 US    60/105877
            PI   LOUIS T WILLIAMS,JAIME ESCOBEDO,MICHAEL A INNIS,PABLO  PI
            DOMINGUEZ GARCIA,
            PI   JULIE SUDDUTH KLINGER,CHRISTOPH REINHARD,KLAUSE GIESE,FILIPPO
            PI   RANDAZZO,
            PI   GIULIA C KENNEDY,DAVID POT,ALTAF KASSAM,GEORGE LAMSON,RADOJE
            PI   DRMANAC,
            PI   RADOMIR CRKVENJAKOV,MARK DICKSON,SNEZANA DRMANAC,IVAN LABAT,
            PI   DENA LESHKOWITZ,DAVID KITA,VERONICA GARCIA,LEE WILLIAM JONES,
            PI   BIRJIT STACHE CRAIN
            PC   C12N15/09,C12N15/09,C07K14/47,C07K14/82,C07K16/18,C12N1/15, PC
              C12N1/19,
            PC   C12N1/21,C12N5/10,C12Q1/68,C12N15/00,C12N5/00,C12N15/00 CC   n
            = A,T,C or G
            FH   Key             Location/Qualifiers
            FT   misc_feature    (1). .(300).
FEATURES             Location/Qualifiers
     source          1. .300
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"

  Query Match             1.2%;  Score 32.4;  DB 1;  Length 300;
  Best Local Similarity   78.0%;  Pred. No. 0.052;
  Matches   39;  Conservative    0;  Mismatches   11;  Indels    0;  Gaps    0;

Qy       1539 TGCACTTGTGAAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1588
              | | || | |  |||  |||| ||||| ||||| |||||||||||||||
Db         89 TCCCCTAGGGCCGTGCCTGTGCGTGTGCGTGTGCGTGTGTGTGTGTGT 138


RESULT 19
AR425705
LOCUS       AR425705                364 bp    DNA     linear   PAT 18-DEC-2003
DEFINITION  Sequence 17202 from patent US 6639063.
ACCESSION   AR425705
VERSION     AR425705.1  GI:40180815
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 364)
  AUTHORS   Edwards,J.-B.D.M., Jobert,S. and Giordano,J.-Y.
  TITLE     EST's and encoded human proteins
  JOURNAL   Patent: US 6639063-A 17202 28-OCT-2003;
FEATURES             Location/Qualifiers
     source          1. .364
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             1.2%;  Score 31.3;  DB 1;  Length 364;
  Best Local Similarity   18.7%;  Pred. No. 0.11;
  Matches   50;  Conservative  101;  Mismatches  113;  Indels    3;  Gaps    1;

Qy        173 TTTACACTGTTGTTTACCCATCTCTTCCTCCAATTGTACAGATGAATCCAGTGTTTCAGG 232
              ::::: | : : :   : |:||::|  :: ::| :|: :  :  :  ||: ::: ::: :
Db         76 KYKRSTCASCKYKGGKMACMTCWSTGAMYRYMASYGWCYSYMARYYTCYSKYRMWKYCYR 135

Qy        233 GGGTCCCTCTTTCTCCAATTGATGCAATTGGAGGCTATGGCTCCTTTGATCACTCCTCCA 292
              : :   : | :  : : : :  |::  ::| :| : :::  :  | :   :::: : ::
Db        136 KYRSRGMCCMWCAGSGMCYSRSAGSRYSKKGSRGRWYWKKGCSRATSKKGRMMWMKKGSR 195

Qy        293 GGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCAGGCCCAATGAT 352
              ::| :: |:::     : : :: : :   :: :| :::    :  |:  :|   : :
Db        196 RRATSRYGMMSSMYGASKRMSSMCSASTRMSSASCMMYM---MMSAGSYASCAWKMSKYR 252
```

```
Qy        353 CATGTGGTCAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGG 412
              ::: |:  ::  : :::: || :   ::||:::::  :       : |:| |  ||||
Db        253 RCAKWSCTYSWYMRASMKKSKYCAWSRKGSKCCMYSRKGSKSCYCCWGGSCCCCGCCAGC 312

Qy        413 TGCAGGCAGGGCCATGGCTCTGGTGAT 439
              |||||||||  |  ||||  |||| |
Db        313 AGCAGGCAGGTGCCAGGCTGGGGTGCT 339


RESULT 20
BD121258
LOCUS       BD121258                 364 bp    DNA     linear   PAT 18-SEP-2002
DEFINITION  EST and encoded human protein.
ACCESSION   BD121258
VERSION     BD121258.1  GI:23216168
KEYWORDS    JP 2002010789-A/13335.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 364)
  AUTHORS   Edwards,J.B.D.M., Jobert,S. and Giordano,J.E.
  TITLE     EST and encoded human protein
  JOURNAL   Patent: JP 2002010789-A 13335 15-JAN-2002;
            GENSET CORP
COMMENT     OS   Homo sapiens (human)
            PN   JP 2002010789-A/13335
            PD   15-JAN-2002
            PF   07-AUG-2000 JP 2000280989
            PR   05-AUG-1999 US    60/147499
            PI   JEAN BAPUTIST DUMAS MILNE EDWARDS,SEVELIN JOBERT,JEAN EVE  PI
             GIORDANO
            PC   C12N15/09,C12N15/09,C07K14/47,C07K16/18,C12N1/15,C12N1/19, PC
             C12N1/21,
            PC   C12N5/10,C12P21/02,C12P21/08,C12Q1/68,C12N15/00,C12N5/00, PC
            C12N15/00
            CC   EST and encoded human protein
            FH   Key             Location/Qualifiers
            FT   source          1. .364
            FT                   /organism='Homo sapiens (human)'.
FEATURES             Location/Qualifiers
     source          1. .364
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"

  Query Match             1.2%;  Score 31.3;  DB 1;  Length 364;
  Best Local Similarity   18.7%;  Pred. No. 0.11;
  Matches   50;  Conservative  101;  Mismatches  113;  Indels    3;  Gaps    1;

Qy        173 TTTACACTGTTGTTTACCCATCTCTTCCTCCAATTGTACAGATGAATCCAGTGTTTCAGG 232
              ::::: | : : :   : |:||::|  :: ::| :|: : :  : :  ||: ::: :::  :
Db         76 KYKRSTCASCKYKGGKMACMTCWSTGAMYRYMASYGWCYSYMARYYTCYSKYRMWKYCYR 135

Qy        233 GGGTCCCTCTTTCTCCAATTGATGCAATTGGAGGCTATGGCTCCTTTGATCACTCCTCCA 292
              : :   : | :   : : : :  |::  ::| :| : :::  :  | :   :::: : ::
Db        136 KYRSRGMCCMWCAGSGMCYSRSAGSRYSKKGSRGRWYWKKGCSRATSKKGRMMWMKKGSR 195

Qy        293 GGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCAGGCCCAATGAT 352
              ::| :: |::::     : : :: : :  :: :| ::::    :  |:  :|   : :
Db        196 RRATSRYGMMSSMYGASKRMSSMCSASTRMSSASCMMYM---MMSAGSYASCAWKMSKYR 252

Qy        353 CATGTGGTCAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGG 412
              ::: |:  ::  : :::: || :   ::||:::::  :       : |:| |  ||||
Db        253 RCAKWSCTYSWYMRASMKKSKYCAWSRKGSKCCMYSRKGSKSCYCCWGGSCCCCGCCAGC 312

Qy        413 TGCAGGCAGGGCCATGGCTCTGGTGAT 439
              |||||||||  |  ||||  |||| |
Db        313 AGCAGGCAGGTGCCAGGCTGGGGTGCT 339


RESULT 21
BC009726/c
```

```
LOCUS       BC009726                 1403 bp    mRNA    linear   PRI 12-NOV-2003
DEFINITION  Homo sapiens protease, serine, 22, mRNA (cDNA clone MGC:9599
            IMAGE:3899480), complete cds.
ACCESSION   BC009726
VERSION     BC009726.1  GI:16307274
KEYWORDS    MGC.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 1403)
  AUTHORS   Strausberg,R.L., Feingold,E.A., Grouse,L.H., Derge,J.G.,
            Klausner,R.D., Collins,F.S., Wagner,L., Shenmen,C.M., Schuler,G.D.,
            Altschul,S.F., Zeeberg,B., Buetow,K.H., Schaefer,C.F., Bhat,N.K.,
            Hopkins,R.F., Jordan,H., Moore,T., Max,S.I., Wang,J., Hsieh,F.,
            Diatchenko,L., Marusina,K., Farmer,A.A., Rubin,G.M., Hong,L.,
            Stapleton,M., Soares,M.B., Bonaldo,M.F., Casavant,T.L.,
            Scheetz,T.E., Brownstein,M.J., Usdin,T.B., Toshiyuki,S.,
            Carninci,P., Prange,C., Raha,S.S., Loquellano,N.A., Peters,G.J.,
            Abramson,R.D., Mullahy,S.J., Bosak,S.A., McEwan,P.J.,
            McKernan,K.J., Malek,J.A., Gunaratne,P.H., Richards,S.,
            Worley,K.C., Hale,S., Garcia,A.M., Gay,L.J., Hulyk,S.W.,
            Villalon,D.K., Muzny,D.M., Sodergren,E.J., Lu,X., Gibbs,R.A.,
            Fahey,J., Helton,E., Ketteman,M., Madan,A., Rodrigues,S.,
            Sanchez,A., Whiting,M., Madan,A., Young,A.C., Shevchenko,Y.,
            Bouffard,G.G., Blakesley,R.W., Touchman,J.W., Green,E.D.,
            Dickson,M.C., Rodriguez,A.C., Grimwood,J., Schmutz,J., Myers,R.M.,
            Butterfield,Y.S., Krzywinski,M.I., Skalska,U., Smailus,D.E.,
            Schnerch,A., Schein,J.E., Jones,S.J. and Marra,M.A.
  TITLE     Generation and initial analysis of more than 15,000 full-length
            human and mouse cDNA sequences
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
  MEDLINE   22388257
   PUBMED   12477932
REFERENCE   2  (bases 1 to 1403)
  AUTHORS   Strausberg,R.
  TITLE     Direct Submission
  JOURNAL   Submitted (29-JUN-2001) National Institutes of Health, Mammalian
            Gene Collection (MGC), Cancer Genomics Office, National Cancer
            Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
            USA
  REMARK    NIH-MGC Project URL: http://mgc.nci.nih.gov
COMMENT     Contact: MGC help desk
            Email: cgapbs-r@mail.nih.gov
            Tissue Procurement: ATCC
            cDNA Library Preparation: Life Technologies, Inc.
            cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
            DNA Sequencing by: Sequencing Group at the Stanford Human Genome
            Center, Stanford University School of Medicine, Stanford, CA  94305
            Web site:       http://www-shgc.stanford.edu
            Contact:  (Dickson, Mark) mcd@paxil.stanford.edu
            Dickson, M., Schmutz, J., Grimwood, J., Rodriquez, A., and Myers,
            R. M.

            Clone distribution: MGC clone distribution information can be found
            through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
            Series: IRAK Plate: 14 Row: l Column: 15
            This clone was selected for full length sequencing because it
            passed the following selection criteria: matched mRNA gi: 21614535.
FEATURES             Location/Qualifiers
     source          1. .1403
                     /organism="Homo sapiens"
                     /mol_type="mRNA"
                     /db_xref="taxon:9606"
                     /clone="MGC:9599 IMAGE:3899480"
                     /tissue_type="Pancreas, epithelioid carcinoma"
                     /clone_lib="NIH_MGC_70"
                     /lab_host="DH10B"
                     /note="Vector: pCMV-SPORT6"
     gene            1. .1403
                     /gene="PRSS22"
                     /note="synonyms: BSSP-4, MGC9599, SP001LA, hBSSP-4"
                     /db_xref="LocusID:64063"
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     CDS             39. .992
                     /codon_start=1
                     /product="protease, serine, 22"
                     /protein_id="AAH09726.1"
                     /db_xref="GI:16307275"
                     /db_xref="LocusID:64063"
                     /translation="MVVSGAPPALGGGCLGTFTSLLLLASTAILNAARIPVPPACGKP
                     QQLNRVVGGEDSTDSEWPWIVSIQKNGTHHCAGSLLTSRWVITAAHCFKDNLNKPYLF
                     SVLLGAWQLGNPGSRSQKVGVAWVEPHPVYSWKEGACADIALVRLERSIQFSERVLPI
                     CLPDASIHLPPNTHCWISGWGSIQDGVPLPHPQTLQKLKVPIIDSEVCSHLYWRGAGQ
                     GPITEDMLCAGYLEGERDACLGDSGGPLMCQVDGAWLLAGIISWGEGCAERNRPGVYI
                     SLSAHRSWVEKIVQGVQLRGRAQGGGALRAPSQGSGAAARS"
     misc_feature    186. .902
                     /note="Tryp_SPc; Region: Trypsin-like serine protease"
                     /db_xref="CDD:cd00190"

  Query Match             1.0%;  Score 28;  DB 1;  Length 1403;
  Best Local Similarity   63.2%;  Pred. No. 1;
  Matches   43;  Conservative    0;  Mismatches   25;  Indels    0;  Gaps    0;

Qy       1966 TTGGTCTTTTTTCCCTTGCATCTTTTAATATTCTTTCTTTGTTCTATACTTTTAGTGATT 2025
             ||  | ||||||   ||   | ||||| | || ||| ||| || | |  |||| | || |
Db       1402 TTTTTTTTTTTTTGTTTTTTTTTTATTTTTTTTTTTTTTTTTTTTTTTTTGGAGAAT 1343

Qy       2026 TGATTATT 2033
                ||| |||
Db       1342 AAATAATT 1335


RESULT 22
BC034377/c
LOCUS       BC034377               1792 bp    mRNA    linear   PRI 12-NOV-2003
DEFINITION  Homo sapiens protein C (inactivator of coagulation factors Va and
            VIIIa), mRNA (cDNA clone MGC:34565 IMAGE:5188604), complete cds.
ACCESSION   BC034377
VERSION     BC034377.1  GI:21707770
KEYWORDS    MGC.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 1792)
  AUTHORS   Strausberg,R.L., Feingold,E.A., Grouse,L.H., Derge,J.G.,
            Klausner,R.D., Collins,F.S., Wagner,L., Shenmen,C.M., Schuler,G.D.,
            Altschul,S.F., Zeeberg,B., Buetow,K.H., Schaefer,C.F., Bhat,N.K.,
            Hopkins,R.F., Jordan,H., Moore,T., Max,S.I., Wang,J., Hsieh,F.,
            Diatchenko,L., Marusina,K., Farmer,A.A., Rubin,G.M., Hong,L.,
            Stapleton,M., Soares,M.B., Bonaldo,M.F., Casavant,T.L.,
            Scheetz,T.E., Brownstein,M.J., Usdin,T.B., Toshiyuki,S.,
            Carninci,P., Prange,C., Raha,S.S., Loquellano,N.A., Peters,G.J.,
            Abramson,R.D., Mullahy,S.J., Bosak,S.A., McEwan,P.J.,
            McKernan,K.J., Malek,J.A., Gunaratne,P.H., Richards,S.,
            Worley,K.C., Hale,S., Garcia,A.M., Gay,L.J., Hulyk,S.W.,
            Villalon,D.K., Muzny,D.M., Sodergren,E.J., Lu,X., Gibbs,R.A.,
            Fahey,J., Helton,E., Ketteman,M., Madan,A., Rodrigues,S.,
            Sanchez,A., Whiting,M., Madan,A., Young,A.C., Shevchenko,Y.,
            Bouffard,G.G., Blakesley,R.W., Touchman,J.W., Green,E.D.,
            Dickson,M.C., Rodriguez,A.C., Grimwood,J., Schmutz,J., Myers,R.M.,
            Butterfield,Y.S., Krzywinski,M.I., Skalska,U., Smailus,D.E.,
            Schnerch,A., Schein,J.E., Jones,S.J. and Marra,M.A.
  TITLE     Generation and initial analysis of more than 15,000 full-length
            human and mouse cDNA sequences
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
  MEDLINE   22388257
   PUBMED   12477932
REFERENCE   2  (bases 1 to 1792)
  AUTHORS   Strausberg,R.
  TITLE     Direct Submission
  JOURNAL   Submitted (02-JUL-2002) National Institutes of Health, Mammalian
            Gene Collection (MGC), Cancer Genomics Office, National Cancer
            Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
            USA
  REMARK    NIH-MGC Project URL: http://mgc.nci.nih.gov
COMMENT     Contact: MGC help desk
            Email: cgapbs-r@mail.nih.gov
            Tissue Procurement: Life Technologies, Inc.
            cDNA Library Preparation: Life Technologies, Inc.
            cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
            DNA Sequencing by: Baylor College of Medicine Human Genome
            Sequencing Center
            Center code: BCM-HGSC
            Web site: http://www.hgsc.bcm.tmc.edu/cdna/
            Contact: amg@bcm.tmc.edu
            Gunaratne, P.H., Garcia, A.M., Lu, X., Hulyk, S.W., Loulseged, H.,
            Kowis, C.R., Sneed, A.J., Martin, R.G., Muzny, D.M., Nanavati,
            A.N., Gibbs, R.A.

            Clone distribution: MGC clone distribution information can be found
            through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
            Series: IRAK Plate: 50 Row: h Column: 4
            This clone was selected for full length sequencing because it
            passed the following selection criteria: matched mRNA gi: 4506114.
FEATURES             Location/Qualifiers
     source          1. .1792
                     /organism="Homo sapiens"
                     /mol_type="mRNA"
                     /db_xref="taxon:9606"
                     /clone="MGC:34565 IMAGE:5188604"
                     /tissue_type="Colon, Kidney, Stomach, adult, whole pooled"
                     /clone_lib="NIH_MGC_116"
                     /lab_host="DH10B"
                     /note="Vector: pCMV-SPORT6"
     gene            1. .1792
                     /gene="PROC"
                     /db_xref="LocusID:5624"
                     /db_xref="MIM:176860"
     CDS             56. .1441
                     /codon_start=1
                     /product="protein C (inactivator of coagulation factors Va
                     and VIIIa)"
                     /protein_id="AAH34377.1"
                     /db_xref="GI:21707771"
                     /db_xref="LocusID:5624"
                     /translation="MWQLTSLLLFVATWGISGTPAPLDSVFSSSERAHQVLRIRKRAN
                     SFLEELRHSSLERECIEEICDFEEAKEIFQNVDDTLAFWSKHVDGDQCLVLPLEHPCA
                     SLCCGHGTCIDGIGSFSCDCRSGWEGRFCQREVSFLNCSLDNGGCTHYCLEEVGWRRC
                     SCAPGYKLGDDLLQCHPAVKFPCGRPWKRMEKKRSHLKRDTEDQEDQVDPRLIDGKMT
                     RRGDSPWQVVLLDSKKKLACGAVLIHPSWVLTAAHCMDESKKLLVRLGEYDLRRWEKW
                     ELDLDIKEVFVHPNYSKSTTDNDIALLHLAQPATLSQTIVPICLPDSGLAERELNQAG
                     QETLVTGWGYHSSREKEAKRNRTFVLNFIKIPVVPHNECSEVMSNMVSENMLCAGILG
                     DRQDACEGDSGGPMVASFHGTWFLVGLVSWGEGCGLLHNYGVYTKVSRYLDWIHGHIR
                     DKEAPQKSWAP"
     misc_feature    125. .316
                     /note="GLA; Region: Domain containing Gla
                     (gamma-carboxyglutamate) residues"
                     /db_xref="CDD:smart00069"
     misc_feature    353. .451
                     /note="EGF_CA; Region: Calcium-binding EGF-like domain,
                     present in a large number of membrane-bound and
                     extracellular (mostly animal) proteins. Many of these
                     proteins require calcium for their biological function and
                     calcium-binding sites have been found to be located at the
                     N-terminus of particular EGF-like domains"
                     /db_xref="CDD:cd00054"
     misc_feature    692. .1399
                     /note="Tryp_SPc; Region: Trypsin-like serine protease"
                     /db_xref="CDD:cd00190"

  Query Match             1.0%;  Score 27.2;  DB 1;  Length 1792;
  Best Local Similarity   61.1%;  Pred. No. 1.7;
  Matches   44;  Conservative    0;  Mismatches   28;  Indels    0;  Gaps    0;

Qy       1962 TTAATTGGTCTTTTTTCCCTTGCATCTTTTAATATTCTTTCTTTGTTCTATACTTTTAGT 2021
              ||  ||  | ||||||   ||   | ||||  | || ||| ||| || | |  |||| ||
Db       1792 TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTCGT 1733
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Qy       2022 GATTTGATTATT 2033
              | ||   || ||
Db       1732 GGTTGTGTTTTT 1721


RESULT 23
AR390799/c
LOCUS       AR390799               1843 bp    DNA     linear   PAT 18-DEC-2003
DEFINITION  Sequence 49 from patent US 6610906.
ACCESSION   AR390799
VERSION     AR390799.1  GI:40113146
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 1843)
  AUTHORS   Kurachi,K. and Kurachi,S.
  TITLE     Nucleotide sequences for gene regulation and methods of use thereof
  JOURNAL   Patent: US 6610906-A 49 26-AUG-2003;
FEATURES             Location/Qualifiers
     source          1. .1843
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.9%;  Score 25.2;  DB 1;  Length 1843;
  Best Local Similarity   55.8%;  Pred. No. 6.1;
  Matches   48;  Conservative    0;  Mismatches   38;  Indels    0;  Gaps    0;

Qy       1605 GTGTGTGTGTCTGTGTCTGTGTCTTGTGTGTCTGTGTTCTCTCCCCTCTTTTGATTTTTG 1664
              | | | | |   | |   | || || | | | | | || | |   | |||| |||||
Db       1838 GGGGGGGGGGGCGGGGGGGGGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT 1779

Qy       1665 GCCTGGAATTATTTATTATTCATATT 1690
              | |||   | ||| ||||||  | ||
Db       1778 TCGTGGTTGTGTTTTTTATTCTTTTT 1753


RESULT 24
AX411026/c
LOCUS       AX411026               1843 bp    DNA     linear   PAT 14-JUN-2002
DEFINITION  Sequence 3673 from Patent WO0229103.
ACCESSION   AX411026
VERSION     AX411026.1  GI:21443731
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Alvares,C., Horne,D., Peres-da-Silva,S. and Vockley,J.G.
  TITLE     Gene expression profiles in liver cancer
  JOURNAL   Patent: WO 0229103-A 3673 11-APR-2002;
            GENE LOGIC INC (US)
FEATURES             Location/Qualifiers
     source          1. .1843
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"
                     /note="EMBL/GenBank Accession No. X02750"

  Query Match             0.9%;  Score 25.2;  DB 1;  Length 1843;
  Best Local Similarity   55.8%;  Pred. No. 6.1;
  Matches   48;  Conservative    0;  Mismatches   38;  Indels    0;  Gaps    0;

Qy       1605 GTGTGTGTGTCTGTGTCTGTGTCTTGTGTGTCTGTGTTCTCTCCCCTCTTTTGATTTTTG 1664
              | | | | |   | |   | || || | | | | | || | |   | |||| |||||
Db       1838 GGGGGGGGGGGCGGGGGGGGGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT 1779

Qy       1665 GCCTGGAATTATTTATTATTCATATT 1690
              | |||   | ||| ||||||  | ||
Db       1778 TCGTGGTTGTGTTTTTTATTCTTTTT 1753


RESULT 25
HSPROTC/c
LOCUS       HSPROTC                1843 bp    mRNA    linear   PRI 05-APR-1995
DEFINITION  Human liver mRNA for protein C.
ACCESSION   X02750
VERSION     X02750.1  GI:35689
KEYWORDS    protein C; signal peptide.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 1843)
  AUTHORS   Beckmann,R.J., Schmidt,R.J., Santerre,R.F., Plutzky,J.,
            Crabtree,G.R. and Long,G.L.
  TITLE     The structure and evolution of a 461 amino acid human protein C
            precursor and its messenger RNA, based upon the DNA sequence of
            cloned human liver cDNAs
  JOURNAL   Nucleic Acids Res. 13 (14), 5233-5247 (1985)
  MEDLINE   85269639
   PUBMED   2991859
COMMENT     Data kindly reviewed (27-MAR-1986) by G. Long.
FEATURES             Location/Qualifiers
     source          1. .1843
                     /organism="Homo sapiens"
                     /mol_type="mRNA"
                     /db_xref="taxon:9606"
     CDS             98. .1483
                     /note="unnamed protein product; protein C precursor"
                     /codon_start=1
                     /protein_id="CAA26528.1"
                     /db_xref="GI:763120"
                     /db_xref="GOA:P04070"
                     /db_xref="SWISS-PROT:P04070"
                     /translation="MWQLTSLLLFVATWGISGTPAPLDSVFSSSERAHQVLRIRKRAN
                     SFLEELRHSSLERECIEEICDFEEAKEIFQNVDDTLAFWSKHVDGDQCLVLPLEHPCA
                     SLCCGHGTCIDGIGSFSCDCRSGWEGRFCQREVSFLNCSLDNGGCTHYCLEEVGWRRC
                     SCAPGYKLGDDLLQCHPAVKFPCGRPWKRMEKKRSHLKRDTEDQEDQVDPRLIDGKMT
                     RRGDSPWQVVLLDSKKKLACGAVLIHPSWVLTAAHCMDESKKLLVRLGEYDLRRWEKW
                     ELDLDIKEVFVHPNYSKSTTDNDIALLHLAQPATLSQTIVPICLPDSGLAERELNQAG
                     QETLVTGWGYHSSREKEAKRNRTFVLNFIKIPVVPHNECSEVMSNMVSENMLCAGILG
                     DRQDACEGDSGGPMVASFHGTWFLVGLVSWGEGCGLLHNYGVYTKVSRYLDWIHGHIR
                     DKEAPQKSWAP"
     sig_peptide     98. .196
                     /note="signal peptide (aa -42 to -10)"
     misc_feature    197. .223
                     /note="propeptide (aa -9 to -1)"
     misc_feature    224. .688
                     /note="light chain (aa 1-155)"
     misc_feature    224. .358
                     /note="gamma carboxylation domain (aa 1-45)"
     misc_feature    359. .496
                     /note="EGF-domain I (aa 46-91)"
     misc_feature    497. .634
                     /note="EGF-domain II (aa 92-137)"
     misc_feature    653. .730
                     /note="activation peptide region (aa 144-169)"
     misc_feature    695. .1531
                     /note="heavy chain (aa 57-419)"
     misc_feature    731. .1531
                     /note="serine protease region (aa 170-419)"
     misc_feature    1759. .1764
                     /note="polyA signal"

  Query Match             0.9%;  Score 25.2;  DB 1;  Length 1843;
  Best Local Similarity   55.8%;  Pred. No. 6.1;
  Matches   48;  Conservative    0;  Mismatches   38;  Indels    0;  Gaps    0;

Qy       1605 GTGTGTGTGTCTGTGTCTGTGTCTTGTGTGTCTGTGTTCTCTCCCCTCTTTTGATTTTTG 1664
              | | | | |   | |   | || || | | | | | || | |   | |||| |||||
Db       1838 GGGGGGGGGGGCGGGGGGGGGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT 1779

Qy       1665 GCCTGGAATTATTTATTATTCATATT 1690
              | |||   | ||| ||||||  | ||
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```
Db       1778 TCGTGGTTGTGTTTTTTATTCTTTTT 1753


RESULT 26
AY083553/c
LOCUS       AY083553                 251 bp    DNA     linear   PRI 13-APR-2002
DEFINITION  Macaca mulatta growth associated protein 43 (GAP43) gene, 3' UTR.
ACCESSION   AY083553
VERSION     AY083553.1  GI:20146915
KEYWORDS    .
SOURCE      Macaca mulatta (rhesus monkey)
  ORGANISM  Macaca mulatta
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
            Cercopithecinae; Macaca.
REFERENCE   1  (bases 1 to 251)
  AUTHORS   Norgren,R.B. Jr., Zink,M.A., Jia,Y., Ojeda,S.R. and Spindel,E.R.
  TITLE     Construction of a targeted rhesus macaque microarray
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 251)
  AUTHORS   Norgren,R.B. Jr., Zink,M.A., Jia,Y., Ojeda,S.R. and Spindel,E.R.
  TITLE     Direct Submission
  JOURNAL   Submitted (11-MAR-2002) Molecular and Cellular Biology Core, Oregon
            Regional Primate Research Center, 505 NW 185th Avenue, Beaverton,
            OR 97006, USA
FEATURES             Location/Qualifiers
     source          1. .251
                     /organism="Macaca mulatta"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9544"
     gene            <1. .>251
                     /gene="GAP43"
     mRNA            <1. .>251
                     /gene="GAP43"
                     /product="growth associated protein 43"
     3'UTR           <1. .>251
                     /gene="GAP43"

  Query Match             0.9%;  Score 24.4;  DB 1;  Length 251;
  Best Local Similarity   82.4%;  Pred. No. 7.7;
  Matches   28;  Conservative    0;  Mismatches    6;  Indels    0;  Gaps    0;

Qy       2129 TTTTTCTTTTTTGGTTTTCTTGAAAATATTTTCC 2162
              ||||||||||||  |||| || ||||| ||| ||
Db         99 TTTTTCTTTTTTTTTTTTTTTAAAATGTTTGCC 66


RESULT 27
AR162089
LOCUS       AR162089                 289 bp    DNA     linear   PAT 17-OCT-2001
DEFINITION  Sequence 17 from patent US 6258558.
ACCESSION   AR162089
VERSION     AR162089.1  GI:16229155
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 289)
  AUTHORS   Szostak,J.W., Roberts,R.W. and Liu,R.
  TITLE     Method for selection of proteins using RNA-protein fusions
  JOURNAL   Patent: US 6258558-A 17 10-JUL-2001;
FEATURES             Location/Qualifiers
     source          1. .289
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.9%;  Score 24.4;  DB 1;  Length 289;
  Best Local Similarity   7.5%;  Pred. No. 7.9;
  Matches   16;  Conservative   79;  Mismatches  119;  Indels    0;  Gaps    0;

Qy        356 GTGGTCAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGC 415
              :|:|  :  :    ::: : ::: : ::  : ::    ::: :  :        : : :
Db         53 RTRGRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRN 112

Qy        416 AGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGTGGGGGTCTGAGGCTCCA 475
              : ::: :  :: :     :  ::          : : : :   :::    :: :  :
Db        113 RNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRN 172

Qy        476 ATGGTTGTTGATGTGGTAGAGTATCTCATACAGAGGATAGCACTAGATGCTGTCTGGGAC 535
              : ::  :  :: : ::  : : :         : : : ::    ::: :  | |  :|:|
Db        173 RNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRCRARGRCRTRGRC 232

Qy        536 ATAGGTAAGCTTTCCAGAGAGACTTCATAATATA 569
              : : : :|:| | |  : : :    |:||| | |
Db        233 RGRTRARARCRTRCRTRTRGRCRGRCRTAAAAAA 266


RESULT 28
AR166614
LOCUS       AR166614                 289 bp    DNA     linear   PAT 17-OCT-2001
DEFINITION  Sequence 17 from patent US 6281344.
ACCESSION   AR166614
VERSION     AR166614.1  GI:16242009
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 289)
  AUTHORS   Szostak,J.W., Roberts,R.W. and Liu,R.
  TITLE     Nucleic acid-protein fusion molecules and libraries
  JOURNAL   Patent: US 6281344-A 17 28-AUG-2001;
FEATURES             Location/Qualifiers
     source          1. .289
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.9%;  Score 24.4;  DB 1;  Length 289;
  Best Local Similarity   7.5%;  Pred. No. 7.9;
  Matches   16;  Conservative   79;  Mismatches  119;  Indels    0;  Gaps    0;

Qy        356 GTGGTCAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGC 415
              :|:|  :  :    ::: : ::: : ::  : ::    ::: :  :        : : :
Db         53 RTRGRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRN 112

Qy        416 AGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGTGGGGGTCTGAGGCTCCA 475
              : ::: :  :: :     :  ::          : : : :   :::    :: :  :
Db        113 RNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRN 172

Qy        476 ATGGTTGTTGATGTGGTAGAGTATCTCATACAGAGGATAGCACTAGATGCTGTCTGGGAC 535
              : ::  :  :: : ::  : : :         : : : ::    ::: :  | |  :|:|
Db        173 RNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRCRARGRCRTRGRC 232

Qy        536 ATAGGTAAGCTTTCCAGAGAGACTTCATAATATA 569
              : : : :|:| | |  : : :    |:||| | |
Db        233 RGRTRARARCRTRCRTRTRGRCRGRCRTAAAAAA 266


RESULT 29
MUSCP/c
LOCUS       MUSCP                    1499 bp    mRNA    linear   ROD 01-FEB-2000
DEFINITION  Mouse mRNA for protein C, complete cds.
ACCESSION   D10445
VERSION     D10445.1  GI:220385
KEYWORDS    anti-clotting activity; anti-coagulation factor; blood coagulation
            factor; calcium binding; mouse protein C; phospholipid binding;
            serine protease.
SOURCE      Mus musculus (house mouse)
  ORGANISM  Mus musculus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE   1  (bases 1 to 1499)
  AUTHORS   Tada,N., Sato,M., Tsujimura,A., Iwase,R. and Hashimoto-Gotoh,T.
  TITLE     Isolation and characterization of a mouse protein C cDNA
  JOURNAL   J. Biochem. 111 (4), 491-495 (1992)
  MEDLINE   92316897
   PUBMED   1618739
```

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REFERENCE   2  (bases 1 to 1499)
  AUTHORS   Sato,M.
  TITLE     Direct Submission
  JOURNAL   Submitted (31-JAN-1992) Masahiro Sato, Hoechst Japan Co., Ltd.,
            Pharma Research Laboratories; 1-3-2 Minamidai, Kawagoe, Saitama
            350, Japan (E-mail:rkikuno@ddbj.nig.ac.jp, Tel:0492-43-6149,
            Fax:0492-41-6475)
COMMENT     Submitted (31-JAN-1992) to DDBJ by:                Masahiro Sato
            Baboratory for Molecular Biology
            Pharma Reseaarch Baboratories
            Hoechst Japan Co., Ltd.
            1-3-2 Minamida, Kawagoe
            Saitama 350
            Japan
            Phone:  0492-43-6149
            Fax:    0492-41-6475
            Email:  rkikuno@ddbj.nig.jc.ap.
FEATURES              Location/Qualifiers
     source           1. .1499
                      /organism="Mus musculus"
                      /mol_type="mRNA"
                      /strain="BALB/c"
                      /sub_species="domesticus"
                      /db_xref="taxon:10090"
     CDS              11. .1396
                      /codon_start=1
                      /product="protein C"
                      /protein_id="BAA01235.1"
                      /db_xref="GI:220386"
                      /translation="MWQFRVFLLLMSTWGISSIPAHPDPVFSSSEHAHQVLRVRRANS
                      FLEEMRPGSLERECMEEICDFEEAQEIFQNVEDTLAFWIKYFDGDQCSAPPLDHQCDS
                      PCCGHGTCIDGIGSFSCSCDKGWEGKFCQQELRFQDCRVNNGGCLHYCLEESNGRRCA
                      CAPGYELADDHMRCKSTVNFPCGKLGRWIEKKRKILKRDTDLEDELEPDPRIVNGTLT
                      KQGDSPWQAILLDSKKKLACGGVLIHTSWVLTAAHCVEGTKKLTVRLGEYDLRRRDHW
                      ELDLDIKEILVHPNYTRSSSDNDIALLRLAQPATLSKTIVPICLPNNGLAQQELTQAG
                      QETVVTGWGYQSDRIKDGRRNRTFILTFIRIPLVARNECVEVMKNVVSENMLCAGIIG
                      NTRDACDGDSGGPMVVFFRGTWFLVGLVSWGEGCGHTNNYGIYTKVGSYLKWIHSYIG
                      EKGVSLKSQKL"
     sig_peptide      11. .133
     mat_peptide      605. .643
                      /product="activation peptide"
     mat_peptide      644. .1393
                      /product="serine protease"

  Query Match             0.9%;  Score 24;  DB 1;  Length 1499;
  Best Local Similarity   46.9%;  Pred. No. 12;
  Matches   75;  Conservative    0;  Mismatches   85;  Indels    0;  Gaps    0;

Qy       2327 CTATCTCTTGTATTCTGTCAGTGAGGCTTGTCTCTGAGGTTCCTGTTGGGTTCTTAATTT 2386
             ||   ||||| | ||    ||    || || |   ||   ||    ||  |  | |   |
Db        715 CTTCTTCTTGGAGTCCAGAAGGATTGCCTGCCAAGGACTGTCACCCTGCTTCGTCAGCGT 656

Qy       2387 TTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTTATTAATTCTATTTCCACTTTCAG 2446
             |    | | |  ||  || | ||   ||  | |  ||| ||| | ||   ||| ||
Db        655 TCCGTTGACTATCCTTGGATCTGGTTCCAGTTCATCTTCTAAGTCTGTGTCTCGTTTGAG 596

Qy       2447 GTCCTGAAATGTTTTACTCATTTTCCTCCCAGTATTTACA 2486
             |  ||    | | ||    ||   ||||||    ||  ||
Db        595 GATCTTGCGTTTCTTCTCTATCCACCTCCCCAGTTTCCCA 556


RESULT 30
AF318182/c
LOCUS       AF318182               1580 bp    mRNA    linear   ROD 14-FEB-2001
DEFINITION  Mus musculus anticoagulant protein C mRNA, complete cds.
ACCESSION   AF318182
VERSION     AF318182.1  GI:12802522
KEYWORDS    .
SOURCE      Mus musculus (house mouse)
  ORGANISM  Mus musculus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE   1  (bases 1 to 1580)
  AUTHORS   Korf,I.
  TITLE     Complete sequence of UC72A01
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 1580)
  AUTHORS   Korf,I.
  TITLE     Direct Submission
  JOURNAL   Submitted (02-NOV-2000) Genetics, Washington University, 4444
            Forest Park Avenue, St. Louis, MO 63108, USA
FEATURES              Location/Qualifiers
     source           1. .1580
                      /organism="Mus musculus"
                      /mol_type="mRNA"
                      /strain="C57BL"
                      /db_xref="dbEST:AA986009"
                      /db_xref="taxon:10090"
     CDS              72. .1454
                      /codon_start=1
                      /product="anticoagulant protein C"
                      /protein_id="AAK07918.1"
                      /db_xref="GI:12802523"
                      /translation="MWQFRVFLLLMSTWGISSIPAHPDPVFSSSEHAHQVLRVRRANS
                      FLEEMRPGSLERECMEEICDLEEAQEIFQNVEDTLAFWIKYFDGDQCSAPPLDHQCDS
                      PCCGHGTCIDGIGSFSCSCDKGWEGKFCQQELRFQDCRVNNGGCLHYCLEESNGRRCA
                      CAPGYELADDHMRCKSTVNFPCGKLGRWIEKKRKILKRDTDLEDELEPDPRIVNGTLT
                      KQGDSPWQAILLDSKKKLACGGVLIHTSWVLTAAHCVEGTKKLTVRLGEYDLRRRDHW
                      ELDLDIKEILVHPNYTRSSSDNDIALLRLAQPATLSKTIVPICLPNNGLAQELTQAGQ
                      ETVVTGWGYQSDRIKDGRRNRTFILTFIRIPLVARNECVEVMKNVVSENMLCAGIIGD
                      TRDACDGDSGGPMVVFFRGTWFLVGLVSWGEGCGHTNNYGIYTKVGSYLKWIHSYIGE
                      KGVSLKSQKL"

  Query Match             0.9%;  Score 24;  DB 1;  Length 1580;
  Best Local Similarity   46.9%;  Pred. No. 13;
  Matches   75;  Conservative    0;  Mismatches   85;  Indels    0;  Gaps    0;

Qy       2327 CTATCTCTTGTATTCTGTCAGTGAGGCTTGTCTCTGAGGTTCCTGTTGGGTTCTTAATTT 2386
             ||   ||||| | ||    ||    || || |   ||   ||    ||  |  | |   |
Db        776 CTTCTTCTTGGAGTCCAGAAGGATTGCCTGCCAAGGACTGTCACCCTGCTTCGTCAGCGT 717

Qy       2387 TTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTTATTAATTCTATTTCCACTTTCAG 2446
             |    | | |  ||  || | ||   ||  | |  ||| ||| | ||   ||| ||
Db        716 TCCGTTGACTATCCTTGGATCTGGTTCCAGTTCATCTTCTAAGTCTGTGTCTCGTTTGAG 657

Qy       2447 GTCCTGAAATGTTTTACTCATTTTCCTCCCAGTATTTACA 2486
             |  ||    | | ||    ||   ||||||    ||  ||
Db        656 GATCTTGCGTTTCTTCTCTATCCACCTCCCCAGTTTCCCA 617


RESULT 31
BC013896/c
LOCUS       BC013896               1603 bp    mRNA    linear   ROD 03-OCT-2003
DEFINITION  Mus musculus protein C, mRNA (cDNA clone MGC:13870 IMAGE:4211329),
            complete cds.
ACCESSION   BC013896
VERSION     BC013896.1  GI:15530229
KEYWORDS    MGC.
SOURCE      Mus musculus (house mouse)
  ORGANISM  Mus musculus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE   1  (bases 1 to 1603)
  AUTHORS   Strausberg,R.L., Feingold,E.A., Grouse,L.H., Derge,J.G.,
            Klausner,R.D., Collins,F.S., Wagner,L., Shenmen,C.M., Schuler,G.D.,
            Altschul,S.F., Zeeberg,B., Buetow,K.H., Schaefer,C.F., Bhat,N.K.,
            Hopkins,R.F., Jordan,H., Moore,T., Max,S.I., Wang,J., Hsieh,F.,
            Diatchenko,L., Marusina,K., Farmer,A.A., Rubin,G.M., Hong,L.,
            Stapleton,M., Soares,M.B., Bonaldo,M.F., Casavant,T.L.,
            Scheetz,T.E., Brownstein,M.J., Usdin,T.B., Toshiyuki,S.,
            Carninci,P., Prange,C., Raha,S.S., Loquellano,N.A., Peters,G.J.,
            Abramson,R.D., Mullahy,S.J., Bosak,S.A., McEwan,P.J.,
            McKernan,K.J., Malek,J.A., Gunaratne,P.H., Richards,S.,
            Worley,K.C., Hale,S., Garcia,A.M., Gay,L.J., Hulyk,S.W.,
            Villalon,D.K., Muzny,D.M., Sodergren,E.J., Lu,X., Gibbs,R.A.,
            Fahey,J., Helton,E., Ketteman,M., Madan,A., Rodrigues,S.,
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            Sanchez,A., Whiting,M., Madan,A., Young,A.C., Shevchenko,Y.,
            Bouffard,G.G., Blakesley,R.W., Touchman,J.W., Green,E.D.,
            Dickson,M.C., Rodriguez,A.C., Grimwood,J., Schmutz,J., Myers,R.M.,
            Butterfield,Y.S., Krzywinski,M.I., Skalska,U., Smailus,D.E.,
            Schnerch,A., Schein,J.E., Jones,S.J. and Marra,M.A.
  TITLE     Generation and initial analysis of more than 15,000 full-length
            human and mouse cDNA sequences
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
  MEDLINE   22388257
   PUBMED   12477932
REFERENCE   2  (bases 1 to 1603)
  AUTHORS   Strausberg,R.
  TITLE     Direct Submission
  JOURNAL   Submitted (07-SEP-2001) National Institutes of Health, Mammalian
            Gene Collection (MGC), Cancer Genomics Office, National Cancer
            Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
            USA
  REMARK    NIH-MGC Project URL: http://mgc.nci.nih.gov
COMMENT     Contact: MGC help desk
            Email: cgapbs-r@mail.nih.gov
            Tissue Procurement: Jeffrey E. Green, M.D.
            cDNA Library Preparation: Life Technologies, Inc.
            cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
            DNA Sequencing by: Institute for Systems Biology
            http://www.systemsbiology.org
            contact: amadan@systemsbiology.org
            Anup Madan, Jessica Fahey, Erin Helton, Mark Ketteman, Anuradha
            Madan, Stephanie Rodrigues, Amy Sanchez and Michelle Whiting

            Clone distribution: MGC clone distribution information can be found
            through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
            Series: IRAK Plate: 18 Row: n Column: 8
            This clone was selected for full length sequencing because it
            passed the following selection criteria: matched mRNA gi: 6679476.
FEATURES             Location/Qualifiers
     source          1. .1603
                     /organism="Mus musculus"
                     /mol_type="mRNA"
                     /strain="FVB/N"
                     /db_xref="taxon:10090"
                     /clone="MGC:13870 IMAGE:4211329"
                     /tissue_type="Liver, normal. 5 month old male mouse."
                     /clone_lib="NCI_CGAP_Li9"
                     /lab_host="DH10B"
                     /note="Vector: pCMV-SPORT6"
     gene            1. .1603
                     /gene="Proc"
                     /note="synonym: PC"
                     /db_xref="LocusID:19123"
                     /db_xref="MGI:97771"
     CDS             100. .1482
                     /codon_start=1
                     /product="protein C"
                     /protein_id="AAH13896.1"
                     /db_xref="GI:15530230"
                     /db_xref="LocusID:19123"
                     /translation="MWQFRVFLLLMSTWGISSIPAHPDPVFSSSEHAHQVLRVRRANS
                     FLEEMRPGSLERECMEEICDFEEAQEIFQNVEDTLAFWIKYFDGDQCSAPPLDHQCDS
                     PCCGHGTCIDGIGSFSCSCDKGWEGKFCQQELRFQDCRVNNGGCLHYCLEESNGRRCA
                     CAPGYELADDHMRCKSTVNFPCGKLGRWIEKKRKILKRDTDLEDELEPDPRIVNGTLT
                     KQGDSPWQAILLDSKKKLACGGVLIHTSWVLTAAHCVEGTKKLTVRLGEYDLRRRDHW
                     ELDLDIKEILVHPNYTRSSSDNDIALLRLAQPATLSKTIVPICLPNNGLAQELTQAGQ
                     ETVVTGWGYQSDRIKDGRRNRTFILTFIRIPLVARNECVEVMKNVVSENMLCAGIIGD
                     TRDACDGDSGGPMVVFFRGTWFLVGLVSWGEGCGHTNNYGIYTKVGSYLKWIHSYIGE
                     KGVSLKSQKL"
     misc_feature    175. .357
                     /note="GLA; Region: Domain containing Gla
                     (gamma-carboxyglutamate) residues. A hyaluronan-binding
                     domain found in proteins associated with the extracellular
                     matrix, cell adhesion and cell migration"
                     /db_xref="CDD:smart00069"
     misc_feature    400. .489
                     /note="EGF; Region: EGF-like domain. There is no clear
                     separation between noise and signal. pfam00053 is very
                     similar, but has 8 instead of 6 conserved cysteines.
                     Includes some cytokine receptors. The EGF domain misses
                     the N-terminus regions of the Ca2+ binding EGF domains.
                     The family is hard to model due to many similar but
                     different sub-types of EGF domains. Pfam certainly misses
                     a number of EGF domains"
                     /db_xref="CDD:pfam00008"
     misc_feature    730. .1431
                     /note="Tryp_SPc; Region: Trypsin-like serine protease"
                     /db_xref="CDD:smart00020"

  Query Match             0.9%;  Score 24;  DB 1;  Length 1603;
  Best Local Similarity   46.9%;  Pred. No. 13;
  Matches   75;  Conservative    0;  Mismatches   85;  Indels    0;  Gaps    0;

Qy       2327 CTATCTCTTGTATTCTGTCAGTGAGGCTTGTCTCTGAGGTTCCTGTTGGGTTCTTAATTT 2386
              ||   ||||| | ||     ||    || || |   ||   ||    ||  |  | |   |
Db        804 CTTCTTCTTGGAGTCCAGAAGGATTGCCTGCCAAGGACTGTCACCCTGCTTCGTCAGCGT 745

Qy       2387 TTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTTATTAATTCTATTTCCACTTTCAG 2446
              |    | | |   ||   || | ||    ||  | |  ||| ||| | ||   ||| ||
Db        744 TCCGTTGACTATCCTTGGATCTGGTTCCAGTTCATCTTCTAAGTCTGTGTCTCGTTTGAG 685

Qy       2447 GTCCTGAAATGTTTTACTCATTTTCCTCCCAGTATTTACA 2486
              |  ||     | | ||    ||   ||||||    ||  ||
Db        684 GATCTTGCGTTTCTTCTCTATCCACCTCCCCAGTTTCCCA 645


RESULT 32
AX839180
LOCUS       AX839180                394 bp    DNA     linear   PAT 15-DEC-2003
DEFINITION  Sequence 23 from Patent WO03076610.
ACCESSION   AX839180
VERSION     AX839180.1  GI:39922629
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Bracco,L., Brinkman,B. and Coignard,F.
  TITLE     Variants of human kallikrein-2 and kallikrein-3 and uses thereof
  JOURNAL   Patent: WO 03076610-A 23 18-SEP-2003;
            Exonhit Therapeutics S.A. (FR)
FEATURES             Location/Qualifiers
     source          1. .394
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.9%;  Score 23.8;  DB 1;  Length 394;
  Best Local Similarity   48.2%;  Pred. No. 12;
  Matches   67;  Conservative    0;  Mismatches   72;  Indels    0;  Gaps    0;

Qy       1510 TGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTGTGTGTGTGTGTGTG 1569
              ||  || ||  |  ||| |||   ||||   | ||       ||   | | |
Db        203 TGCCCACTGCATCAGGAATCTCCATATCCCCCCCTCTCTCTGTCCTTCTCTAGTCCCTCT 262

Qy       1570 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTCTGTGTCTGTGTCTT 1629
              |   |||||| |     ||| | | | ||   |  | ||| |||  |||| |||||
Db        263 CTAGCCAGTGTGTCTCACCCTGTATCTCTCTGCCAGGCTCTGTCTCTCGGTCTCTGTCTC 322

Qy       1630 GTGTGTCTGTGTTCTCTCC 1648
                |||   |  || || |
Db        323 ACCTGTGCCTTCTCCCTAC 341


RESULT 33
BD124660
LOCUS       BD124660                868 bp    DNA     linear   PAT 18-SEP-2002
DEFINITION  Primer for synthesizing full-length cDNA and use thereof.
ACCESSION   BD124660
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VERSION     BD124660.1  GI:23219605
KEYWORDS    JP 2002017375-A/91.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 868)
  AUTHORS   Ota,T., Nishikawa,T., Isogai,T., Hayashi,K., Ishii,S., Kawai,Y.,
            Wakamatsu,A., Sugiyama,T., Nagai,K., Kojima,S., Otsuki,T. and
            Koga,H.
  TITLE     Primer for synthesizing full-length cDNA and use thereof
  JOURNAL   Patent: JP 2002017375-A 91 22-JAN-2002;
            HELIX RESEARCH INSTITUTE
COMMENT     OS   Homo sapiens (human)
            PN   JP 2002017375-A/91
            PD   22-JAN-2002
            PF   07-JUL-2000 JP 2000253172
            PI   TOSHIO OTA,TETSUO NISHIKAWA,TAKAO ISOGAI,KOJI HAYASHI,SHIZUKO
            PI   ISHII,
            PI   YURI KAWAI,AI WAKAMATSU,TOMOYASU SUGIYAMA,KEIICHI NAGAI, PI
            SHINICHI KOJIMA,
            PI   TETSUJI OTSUKI,HISASHI KOGA
            PC
            C12N15/09,C07K14/47,C07K16/18,C12N1/15,C12N1/19,C12N1/21,C12N5/ PC
             10,
            PC   C12P21/02,C12Q1/68//C12P21/08,G06F17/30,C12N15/00,C12N5/00 CC
             Primer for synthesizing full-length cDNA and use thereof FH   Key
                      Location/Qualifiers
            FT   source          1. .868
            FT                   /organism='Homo sapiens (human)'.
FEATURES              Location/Qualifiers
     source           1. .868
                      /organism="Homo sapiens"
                      /mol_type="genomic DNA"
                      /db_xref="taxon:9606"

  Query Match              0.9%;  Score 23.8;  DB 1;  Length 868;
  Best Local Similarity   57.3%;  Pred. No. 13;
  Matches   43;  Conservative    0;  Mismatches   32;  Indels    0;  Gaps    0;

Qy        923 ATTCAATTTTGGAGAGTTTCATAGGGTGCTGACAAGAAGGTACAGTCTTTGTGTTTTGGT 982
              |||  |  ||| | || ||||| | | |  | |||||   || ||  |  ||| ||
Db        107 ATTGGAAGTTGCAAAGATTCATTGAGGGGAGCAAGGAAGGAGGAGCCTCAGCCTTTAGGA 166

Qy        983 GAAATAGTCTGTAAA 997
              |  |  | | ||||
Db        167 GCTTTCCTTTTTAAA 181


RESULT 34
BD126609
LOCUS       BD126609                868 bp    DNA     linear   PAT 18-SEP-2002
DEFINITION  Primer for synthesizing full-length cDNA and use thereof.
ACCESSION   BD126609
VERSION     BD126609.1  GI:23221554
KEYWORDS    JP 2002017375-A/2040.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 868)
  AUTHORS   Ota,T., Nishikawa,T., Isogai,T., Hayashi,K., Ishii,S., Kawai,Y.,
            Wakamatsu,A., Sugiyama,T., Nagai,K., Kojima,S., Otsuki,T. and
            Koga,H.
  TITLE     Primer for synthesizing full-length cDNA and use thereof
  JOURNAL   Patent: JP 2002017375-A 2040 22-JAN-2002;
            HELIX RESEARCH INSTITUTE
COMMENT     OS   Homo sapiens (human)
            PN   JP 2002017375-A/2040
            PD   22-JAN-2002
            PF   07-JUL-2000 JP 2000253172
            PI   TOSHIO OTA,TETSUO NISHIKAWA,TAKAO ISOGAI,KOJI HAYASHI,SHIZUKO
            PI   ISHII,
            PI   YURI KAWAI,AI WAKAMATSU,TOMOYASU SUGIYAMA,KEIICHI NAGAI, PI
            SHINICHI KOJIMA,
            PI   TETSUJI OTSUKI,HISASHI KOGA
            PC
            C12N15/09,C07K14/47,C07K16/18,C12N1/15,C12N1/19,C12N1/21,C12N5/ PC
             10,
            PC   C12P21/02,C12Q1/68//C12P21/08,G06F17/30,C12N15/00,C12N5/00 CC
             Primer for synthesizing full-length cDNA and use thereof FH   Key
                      Location/Qualifiers
            FT   source          1. .868
            FT                   /organism='Homo sapiens (human)'.
FEATURES              Location/Qualifiers
     source           1. .868
                      /organism="Homo sapiens"
                      /mol_type="genomic DNA"
                      /db_xref="taxon:9606"

  Query Match              0.9%;  Score 23.8;  DB 1;  Length 868;
  Best Local Similarity   57.3%;  Pred. No. 13;
  Matches   43;  Conservative    0;  Mismatches   32;  Indels    0;  Gaps    0;

Qy        923 ATTCAATTTTGGAGAGTTTCATAGGGTGCTGACAAGAAGGTACAGTCTTTGTGTTTTGGT 982
              |||  |  ||| | || ||||| | | |  | |||||   || ||  |  ||| ||
Db        107 ATTGGAAGTTGCAAAGATTCATTGAGGGGAGCAAGGAAGGAGGAGCCTCAGCCTTTAGGA 166

Qy        983 GAAATAGTCTGTAAA 997
              |  |  | | ||||
Db        167 GCTTTCCTTTTTAAA 181


RESULT 35
AY040345/c
LOCUS       AY040345                1671 bp    mRNA    linear   VRT 25-JUL-2001
DEFINITION  Danio rerio coagulation factor VII mRNA, complete cds.
ACCESSION   AY040345
VERSION     AY040345.1  GI:15020317
KEYWORDS    .
SOURCE      Danio rerio (zebrafish)
  ORGANISM  Danio rerio
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Actinopterygii; Neopterygii; Teleostei; Ostariophysi;
            Cypriniformes; Cyprinidae; Danio.
REFERENCE   1  (bases 1 to 1671)
  AUTHORS   Sheehan,J., Templer,M., Gregory,M., Hanumanthaiah,R., Troyer,D.,
            Phan,T., Thankavel,B. and Jagadeeswaran,P.
  TITLE     Demonstration of the extrinsic coagulation pathway in teleostei:
            identification of zebrafish coagulation factor VII
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 98 (15), 8768-8773 (2001)
  MEDLINE   21353085
   PUBMED   11459993
REFERENCE   2  (bases 1 to 1671)
  AUTHORS   Sheehan,J., Templer,M., Gregory,M., Hanumanthaiah,R., Troyer,D.,
            Phan,T., Thankavel,B. and Jagadeeswaran,P.
  TITLE     Direct Submission
  JOURNAL   Submitted (14-JUN-2001) Cellular and Structural Biology, University
            of Texas Health Science Center at San Antonio, 7703 Floyd Curl
            Drive, San Antonio, TX 78229, USA
FEATURES              Location/Qualifiers
     source           1. .1671
                      /organism="Danio rerio"
                      /mol_type="mRNA"
                      /db_xref="taxon:7955"
     CDS              1. .1302
                      /codon_start=1
                      /product="coagulation factor VII"
                      /protein_id="AAK74192.1"
                      /db_xref="GI:15020318"
                      /translation="MSLLLVFSLLWSLHYCHSAAVFVHRDEAHEVLIRSKRANSGWFE
                      ELKTGNLERECLEEKCSYEEAREVFEHTEATNEFWKIYDVKDHCASSPCEHDGLCTTQ
                      NADSYMCLCAPGFSGRHCEQSIGDVLDSCLHDNGGCEHFCTEQDGRRNCSCADGYYLD
                      NSGQKCRSHEVFPCGKVPLLQAGKAADHQVDLRSRIVGGSECPKGHCPWQVLLKYGEK
                      GFCGGVIYKPTWILTAAHCLEKLKVKFLRIVAGEHDLEVDEGTEQLIQVDQMFTHPAY
                      VSETADSDIALLRLRTPIVYSVYAVPVCLPLREMAERELWAVSKHTVSGWGKRSEDGP
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TSRLLRRLLVPRIRTQECVQVSNLTLTSNMFCAGYIEGRQDSCKGDSGGPLVTRYRDT
AFLLGIVSWGKGCARPGSYGIYTRVSNYLQWIRQTTNTTIH"

Query Match 0.9%; Score 23.6; DB 1; Length 1671;
Best Local Similarity 54.7%; Pred. No. 16;
Matches 47; Conservative 0; Mismatches 39; Indels 0; Gaps 0;

```
Qy       1755 TGAAGATAGATATTCTTTACATCTGATTTTATCTTAGAATGTCTTTCTTTCTCCAACTAT 1814
             | || ||| ||||| |||| |   || | || ||   || | || |   |   ||||||
Db       1436 TTAATATAAATATTTTTTATTTTCAATATAATTTTGCTATTTTTTACAAACATTAACTAT 1377

Qy       1815 TGTGACAGAAAGTTTTTCTAAGTGCA 1840
                |     | | || ||    || ||
Db       1376 AATAGTTAATATTTGTTAATTGTTCA 1351
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RESULT 36
AR425705/c
LOCUS AR425705 364 bp DNA linear PAT 18-DEC-2003
DEFINITION Sequence 17202 from patent US 6639063.
ACCESSION AR425705
VERSION AR425705.1 GI:40180815
KEYWORDS .
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.
REFERENCE 1 (bases 1 to 364)
AUTHORS Edwards,J.-B.D.M., Jobert,S. and Giordano,J.-Y.
TITLE EST's and encoded human proteins
JOURNAL Patent: US 6639063-A 17202 28-OCT-2003;
FEATURES Location/Qualifiers
source 1. .364
/organism="unknown"
/mol_type="genomic DNA"

Query Match 0.8%; Score 23; DB 1; Length 364;
Best Local Similarity 10.5%; Pred. No. 20;
Matches 14; Conservative 67; Mismatches 52; Indels 0; Gaps 0;

```
Qy       1096 TTGAAGTAGCCCACTATCTGTGTGTGAGGTCAATATGTGATTTTAGCTGTAGCTGTGCTT 1155
              :||::: ::: :  :    :: ||: : ::::   |:    ::::: :| : :   : :
Db        277 WTGRMSMMKSTYKRWSRAGSWMTGYYRMSKMWTGSTRSCTSKKKRKKGSTSSKYASTSGK 218

Qy       1156 GTTTTATGAACTTGGGTGACATTGTGTTTGGTGCATAGACATTAAGAATTGCAATGTCCT 1215
              : ::  | : : :: :::|  :::   ::::: :: |  :   :::: ::|:: :::||
Db        217 SSKYMSTCRKSSKKCRYSATYYYSCMMKWKKYCMMSATYSGCMMWRWYCYSCMMSRYSCT 158

Qy       1216 CTTGGTGGATTTT 1228
              :: :|: : | ::
Db        157 SYSRGKCSCTGWK 145
```

RESULT 37
BD121258/c
LOCUS BD121258 364 bp DNA linear PAT 18-SEP-2002
DEFINITION EST and encoded human protein.
ACCESSION BD121258
VERSION BD121258.1 GI:23216168
KEYWORDS JP 2002010789-A/13335.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 364)
AUTHORS Edwards,J.B.D.M., Jobert,S. and Giordano,J.E.
TITLE EST and encoded human protein
JOURNAL Patent: JP 2002010789-A 13335 15-JAN-2002;
GENSET CORP
COMMENT OS Homo sapiens (human)
PN JP 2002010789-A/13335
PD 15-JAN-2002
PF 07-AUG-2000 JP 2000280989
PR 05-AUG-1999 US 60/147499
PI JEAN BAPUTIST DUMAS MILNE EDWARDS,SEVELIN JOBERT,JEAN EVE GIORDANO
PC C12N15/09,C12N15/09,C07K14/47,C07K16/18,C12N1/15,C12N1/19, C12N1/21,
PC C12N5/10,C12P21/02,C12P21/08,C12Q1/68,C12N15/00,C12N5/00, C12N15/00
CC EST and encoded human protein
FH Key Location/Qualifiers
FT source 1. .364
FT /organism='Homo sapiens (human)'.
FEATURES Location/Qualifiers
source 1. .364
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"

Query Match 0.8%; Score 23; DB 1; Length 364;
Best Local Similarity 10.5%; Pred. No. 20;
Matches 14; Conservative 67; Mismatches 52; Indels 0; Gaps 0;

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Qy       1096 TTGAAGTAGCCCACTATCTGTGTGTGAGGTCAATATGTGATTTTAGCTGTAGCTGTGCTT 1155
              :||::: ::: :  :    :: ||: : ::::   |:    ::::: :| : :   : :
Db        277 WTGRMSMMKSTYKRWSRAGSWMTGYYRMSKMWTGSTRSCTSKKKRKKGSTSSKYASTSGK 218

Qy       1156 GTTTTATGAACTTGGGTGACATTGTGTTTGGTGCATAGACATTAAGAATTGCAATGTCCT 1215
              : ::  | : : :: :::|  :::   ::::: :: |  :   :::: ::|:: :::||
Db        217 SSKYMSTCRKSSKKCRYSATYYYSCMMKWKKYCMMSATYSGCMMWRWYCYSCMMSRYSCT 158

Qy       1216 CTTGGTGGATTTT 1228
              :: :|: : | ::
Db        157 SYSRGKCSCTGWK 145
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RESULT 38
AF465274
LOCUS AF465274 1329 bp mRNA linear VRT 02-FEB-2003
DEFINITION Takifugu rubripes coagulation factor VIIb precursor, mRNA, complete cds.
ACCESSION AF465274
VERSION AF465274.1 GI:28194019
KEYWORDS .
SOURCE Takifugu rubripes (Fugu rubripes)
ORGANISM Takifugu rubripes
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;
Tetradontoidea; Tetraodontidae; Takifugu.
REFERENCE 1 (bases 1 to 1329)
AUTHORS Davidson,C.J., Hirt,R.P., Lal,K., Snell,P., Elgar,G., Tuddenham,E.G.D. and McVey,J.H.
TITLE Comparative sequence analysis and molecular evolution of blood coagulation genes from Gallus gallus and Fugu rubripes
JOURNAL Unpublished
REFERENCE 2 (bases 1 to 1329)
AUTHORS McVey,J.H., Davidson,C.J., Lal,K., Snell,P. and Elgar,G.
TITLE Direct Submission
JOURNAL Submitted (04-JAN-2002) Haemostasis Group, MRC Clinical Sciences Centre, The Faculty of Medicine, Imperial College, Hammersmith Campus, Du Cane Road, London W12 0NN, UK
FEATURES Location/Qualifiers
source 1. .1329
/organism="Takifugu rubripes"
/mol_type="mRNA"
/db_xref="taxon:31033"
CDS 1. .1329
/EC_number="3.4.21.21"
/function="serum prothrombinconversion accelerator"
/note="vitamin K dependent serine protease; similar to Fugu rubripes FVII; synthesized in liver; contains 2 EGF-like domains; member of peptidase family S1/trypsin family"
/codon_start=1
/product="coagulation factor VIIb precursor"

/protein_id="AAO33369.1"
/db_xref="GI:28194020"
/translation="MLIRICCTVWILFSATAAAAVFVERDDASTVLQRRRRANSGFLE
EMQQGNLKRECIEEICNYEEAREVFEDDAQTRKFWETYNRHDPCSVMPCQNNGVCVSM
GNTYQCHCPEGFGGQRCETKAEDFLKCLYQNGQCQHFCDGSGASRKCFCAHGYTLASD
GRQCIAEVEFPCGQLPPPETGPDQTVVGQTRLVGTNHCPKGECPWQVLVQLHGQSHCG
GVLIRPDWVITAAHCVTGKQPQHLSVVAGEHNLDNDDGTEQKIPVARVFAHEGYVSET
GDKDIALLHLNASVTLNRGVIPVCLPTKDLAERELLMTRYHTVSGWGKRTNGGNEDHG
VVNTAPVSPFLRKFSVPIIPNPQCSHRSQFNFTDNMFCAGYLEGNQQSCRGDDGSPLV
TLYGSTHFLIGVVGWGRGCPNPGYYGVYTNMGNFVDWANGIMMAANKKST"

Query Match 0.8%; Score 23; DB 1; Length 1329;
Best Local Similarity 74.4%; Pred. No. 23;
Matches 29; Conservative 0; Mismatches 10; Indels 0; Gaps 0;

Qy 2021 TGATTTGATTATTATGCACTGTGGGGAGTTTCTTTTCCG 2059
||||| | | |||||||| ||| | ||||||||||
Db 5 TGATTAGGATTTGCTGCACTGTTTGGATTCTCTTTTCCG 43

RESULT 39
AX774765/c
LOCUS AX774765 1507 bp DNA linear PAT 09-JUL-2003
DEFINITION Sequence 81 from Patent WO03038129.
ACCESSION AX774765
VERSION AX774765.1 GI:32486281
KEYWORDS .
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Raponi,M.
TITLE Methods for assessing and treating leukemia
JOURNAL Patent: WO 03038129-A 81 08-MAY-2003;
Ortho-Clinical Diagnostics, Inc. (US)
FEATURES Location/Qualifiers
source 1. .1507
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.8%; Score 23; DB 1; Length 1507;
Best Local Similarity 60.3%; Pred. No. 23;
Matches 38; Conservative 0; Mismatches 25; Indels 0; Gaps 0;

Qy 2070 TTTGGTGTTTTGTATGCTTCTTGTACCTTGATAGGCATCTCTTTCTCAAGGTTAGGAAAT 2129
||| | |||| | | || || | |||| || ||||| | | | || |||| |
Db 1506 TTTTTTTTTTTTTTTTTTTTTTTTTTTTTGAGTGGGATCTCACTTTAATGGAGAGGACGT 1447

Qy 2130 TTT 2132
| |
Db 1446 TAT 1444

RESULT 40
HUMFACX/c
LOCUS HUMFACX 1507 bp mRNA linear PRI 08-NOV-1994
DEFINITION Human coagulation factor X (F10) mRNA, complete cds.
ACCESSION M57285
VERSION M57285.1 GI:182389
KEYWORDS coagulation factor X.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 1507)
AUTHORS Messier,T.L., Pittman,D.D., Long,G.L., Kaufman,R.J. and Church,W.R.
TITLE Cloning and expression in COS-1 cells of a full-length cDNA
encoding human coagulation factor X
JOURNAL Gene 99 (2), 291-294 (1991)
MEDLINE 91216473
PUBMED 1902434

COMMENT Original source text: Human, cDNA to mRNA.
FEATURES Location/Qualifiers
source 1. .1507
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/map="13q34"
/tissue_type="liver"
gene 1. .1507
/gene="F10"
CDS 1. .1467
/gene="F10"
/EC_number="3.4.21.6"
/codon_start=1
/product="coagulation factor X"
/protein_id="AAA52421.1"
/db_xref="GI:182390"
/db_xref="GDB:G00-119-890"
/translation="MGRPLHLVLLSASLAGLLLLGESLFIRREQANNILARVTRANSF
LEEMKKGHLERECMEETCSYEEAREVFEDSDKTNEFWNKYKDGDQCETSPCQNQGKCK
DGLGEYTCTCLEGFEGKNCELFTRKLCSLDNGDCDQFCHEEQNSVVCSCARGYTLADN
GKACIPTGPYPCGKQTLERRKRSVAQATSSSGEAPDSITWKPYDAADLDPTENPFDLL
DFNQTQPERGDNNLTRIVGGQECKDGECPWQALLINEENEGFCGGTILSEFYILTAAH
CLYQAKRFKVRVGDRNTEQEEGGEAVHEVEVVIKHNRFTKETYDFDIAVLRLKTPITF
RMNVAPACLPERDWAESTLMTQKTGIVSGFGRTHEKGRQSTRLKMLEVPYVDRNSCKL
SSSFIITQNMFCAGYDTKQEDACQGDSGGPHVTRFKDTYFVTGIVSWGEGCARKGKYG
IYTKVTAFLKWIDRSMKTRGLPKAKSHAPEVITSSPLK"
misc_feature 1004. .1060
/gene="F10"
/note="putative VECTOR sequence Bacteriophage lambda
(J02459); putative"

Query Match 0.8%; Score 23; DB 1; Length 1507;
Best Local Similarity 60.3%; Pred. No. 23;
Matches 38; Conservative 0; Mismatches 25; Indels 0; Gaps 0;

Qy 2070 TTTGGTGTTTTGTATGCTTCTTGTACCTTGATAGGCATCTCTTTCTCAAGGTTAGGAAAT 2129
||| | |||| | | || || | |||| || ||||| | | | || |||| |
Db 1506 TTTTTTTTTTTTTTTTTTTTTTTTTTTTTGAGTGGGATCTCACTTTAATGGAGAGGACGT 1447

Qy 2130 TTT 2132
| |
Db 1446 TAT 1444

RESULT 41
AF191307/c
LOCUS AF191307 1514 bp mRNA linear MAM 01-NOV-2000
DEFINITION Sus scrofa protein C mRNA, complete cds.
ACCESSION AF191307
VERSION AF191307.1 GI:11065893
KEYWORDS .
SOURCE Sus scrofa (pig)
ORGANISM Sus scrofa
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
REFERENCE 1 (bases 1 to 1514)
AUTHORS Grimm,D.R., Colter,M.B. and Kim,H.
TITLE Cloning of the complete cDNA sequences encoding porcine factor V
and protein C
JOURNAL Unpublished
REFERENCE 2 (bases 1 to 1514)
AUTHORS Grimm,D.R., Colter,M.B. and Kim,H.
TITLE Direct Submission
JOURNAL Submitted (01-OCT-1999) Research/S.S.F., Shriners Hospital, 12502
North Pine Drive, Tampa, FL 33612, USA
FEATURES Location/Qualifiers
source 1. .1514
/organism="Sus scrofa"
/mol_type="mRNA"
/db_xref="taxon:9823"
/clone="92N.4; 58/86.2; 12N3.1"
/tissue_type="liver"

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     CDS             22. .1401
                     /note="serine protease"
                     /codon_start=1
                     /product="protein C"
                     /protein_id="AAG28380.1"
                     /db_xref="GI:11065894"
                     /translation="MWQLASLLLLLIIWAVSSTPVPPDSVFSSSQRAHQMLRSKRANS
                     FLEELRPSSLERECKEETCDFEEAREIFQNTENTMAFWSKYHDGDQCAVSPPEHLCDS
                     PCCGRGTCIDGLGGFRCDCAQGWEGRFCLHEVRFSNCSTENGGCAHYCLEEEGGRRCA
                     CAPGYRLGDDHLQCEPKVRSPCGRLGNRMEKKRKNLKRDTDQVDKKEDQIDPRLVNGK
                     QSPWGESPWQVILLDSKKKLACGAVLIHVSWVLTAAHCLDDYKKLTVRLGEYDLRRRE
                     KWEVDLDIKEFLVHPNYTRSTSDNDIALLRLAEPATFSQTIVPICLPDSGLSERELTR
                     VGQETVVTGWGYRSEAKTNRSFILNFIKVPVAPHNECVQAMHNKISENMLCAGILGDS
                     RDACEGDSGGPMVASFRGTWFLVGLVSWGEGCGRLHNYGVYTKVSRYLDWIHGHIRME
                     EAFHKNQVP"

  Query Match              0.8%;  Score 23;  DB 1;  Length 1514;
  Best Local Similarity   63.6%;  Pred. No. 23;
  Matches   35;  Conservative    0;  Mismatches   20;  Indels    0;  Gaps    0;

Qy        341 AGGCCCAATGATCATGTGGTCAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAG 395
              ||||.|    | || |||||    | | |||    | | |   |||||||||| |||||
Db       1398 AGGCACCTGGTTCTTGTGGAAGGCCTCCTCCATTCTGATGTGGCCATGGATCCAG 1344


RESULT 42
AX395271/c
LOCUS       AX395271                 200 bp    DNA     linear   PAT 18-MAY-2002
DEFINITION  Sequence 8 from Patent WO0203787.
ACCESSION   AX395271
VERSION     AX395271.1  GI:21066295
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Allen,K.D. and Leviten,M.W.
  TITLE     Transgenic mice containing targeted gene disruptions
  JOURNAL   Patent: WO 0203787-A 8 17-JAN-2002;
            Deltagen, Inc. (US)
FEATURES             Location/Qualifiers
     source          1. .200
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Targeting Vector"

  Query Match              0.8%;  Score 22.8;  DB 1;  Length 200;
  Best Local Similarity   46.8%;  Pred. No. 21;
  Matches   72;  Conservative    0;  Mismatches   82;  Indels    0;  Gaps    0;

Qy        439 TCACTCCTCTAGTGAAAGGTGGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              || |||  ||      ||||| |  | |  |||  |  ||   ||   |||||| |  |
Db        198 TCCCTCTCCTGTATCCAGGTGTGCATGTCGGGCATCCCTGTGGGTGTTTGTGGTCGGCTG 139

Qy        499 TCTCATACAGAGGATAGCACTAGATGCTGTCTGGGACATAGGTAAGCTTTCCAGAGAGAC 558
              |||       | | ||    |    ||   ||| ||  ||    |    | ||| ||| |
Db        138 TCTGTCCATGCTGCTATACCCCAGTGTGCTCTTTGATCCAGTCCCGAACTACAGGGAGCC 79

Qy        559 TTCATAATATATTTTCTTGAAGCCTCTGCTGGCA 592
              ||    | |    |   |    ||||||   |||
Db         78 TTGTGTACACGCCTGGCTTGTTCCTCTGAGCGCA 45


RESULT 43
AB062458S3/c
LOCUS       AB062458S3               210 bp    DNA     linear   PRI 07-JUN-2001
DEFINITION  Pan troglodytes F9 gene for coagulation factor XI, exon 4,
            isolate:504.
ACCESSION   AB062462
VERSION     AB062462.1  GI:14270094
KEYWORDS    .
SEGMENT     3 of 7
SOURCE      Pan troglodytes (chimpanzee)
  ORGANISM  Pan troglodytes
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Pan.
REFERENCE   1
  AUTHORS   Satta,Y.
  TITLE     Comparison of DNA and protein polymorphims between humans and
            chimpanzees
  JOURNAL   Genes Genet. Syst. (2001) In press
REFERENCE   2  (bases 1 to 210)
  AUTHORS   Satta,Y.
  TITLE     Direct Submission
  JOURNAL   Submitted (29-MAY-2001) Yoko Satta, The Graduate University for
            Advanced Studies, Department of Biosystems Science; 1560-35
            Kamiyamaguchi, Hayama, Kanagawa 240-0193, Japan
            (E-mail:satta@mailsv.soken.ac.jp, Tel:81-468-58-1574,
            Fax:81-468-58-1544)
FEATURES             Location/Qualifiers
     source          1. .210
                     /organism="Pan troglodytes"
                     /mol_type="genomic DNA"
                     /isolate="504"
                     /db_xref="taxon:9598"
                     /sex="female"
                     /note="CDS is reported in Acc#:AB062470"
     exon            97. .210
                     /gene="F9"
                     /product="coagulation factor XI"
                     /number=4

  Query Match              0.8%;  Score 22.8;  DB 1;  Length 210;
  Best Local Similarity   54.9%;  Pred. No. 21;
  Matches   45;  Conservative    0;  Mismatches   37;  Indels    0;  Gaps    0;

Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
              | |||  || | || ||   |    ||  ||   | |  |||  || |  |  |   |||
Db        133 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 74

Qy       2664 CTTTGGCATATAGACGGCTGAG 2685
              |||||| ||| || ||| ||
Db         73 AATTGGCACATAAACTGCTTAG 52


RESULT 44
AB062459S3/c
LOCUS       AB062459S3               210 bp    DNA     linear   PRI 31-MAY-2001
DEFINITION  Pan troglodytes F9 gene for coagulation factor XI, exon 4,
            isolate:505.
ACCESSION   AB062463
VERSION     AB062463.1  GI:14270118
KEYWORDS    .
SEGMENT     3 of 7
SOURCE      Pan troglodytes (chimpanzee)
  ORGANISM  Pan troglodytes
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Pan.
REFERENCE   1
  AUTHORS   Satta,Y.
  TITLE     Comparison of DNA and protein polymorphims between humans and
            chimpanzees
  JOURNAL   Genes Genet. Syst. (2001) In press
REFERENCE   2  (bases 1 to 210)
  AUTHORS   Satta,Y.
  TITLE     Direct Submission
  JOURNAL   Submitted (29-MAY-2001) Yoko Satta, The Graduate University for
            Advanced Studies, Department of Biosystems Science; 1560-35
            Kamiyamaguchi, Hayama, Kanagawa 240-0193, Japan
            (E-mail:satta@mailsv.soken.ac.jp, Tel:81-468-58-1574,
            Fax:81-468-58-1544)
FEATURES             Location/Qualifiers
     source          1. .210
                     /organism="Pan troglodytes"
                     /mol_type="genomic DNA"
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                     /isolate="505"
                     /db_xref="taxon:9598"
                     /sex="male"
                     /note="CDS is reported in Acc#:AB062471"
     exon            97. .210
                     /gene="F9"
                     /product="coagulation factor XI"
                     /number=4

  Query Match              0.8%;  Score 22.8;  DB 1;  Length 210;
  Best Local Similarity   54.9%;  Pred. No. 21;
  Matches   45;  Conservative    0;  Mismatches   37;  Indels    0;  Gaps    0;

Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
             | |||  || | || ||    |    ||  ||   | |  |||  || |  |  |   |||
Db        133 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 74

Qy       2664 CTTTGGCATATAGACGGCTGAG 2685
                |||||| ||| || ||| ||
Db         73 AATTGGCACATAAACTGCTTAG 52


RESULT 45
HSU29534
LOCUS       HSU29534                 252 bp    DNA     linear   PRI 18-APR-1997
DEFINITION  Human MHC class II antigen HLA-DP-beta (HLA-DPB1) gene, exon 2,
            partial cds.
ACCESSION   U29534
VERSION     U29534.1  GI:903973
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 252)
  AUTHORS   Noble,J.A., Cavalli,A.S. and Erlich,H.A.
  TITLE     DPB1*5901a: a novel HLA-DPB1 allele from a Caucasian family with
            insulin-dependent diabetes mellitus
  JOURNAL   Tissue Antigens 47 (2), 159-162 (1996)
  MEDLINE   97004423
   PUBMED   8851734
REFERENCE   2  (bases 1 to 252)
  AUTHORS   Noble,J.A. and Erlich,H.A.
  TITLE     Direct Submission
  JOURNAL   Submitted (19-JUN-1995) Janelle A. Noble, Human Genetics, Roche
            Molecular Systems, 1145 Atlantic Ave., Alameda, CA 94501, USA
FEATURES             Location/Qualifiers
     source          1. .252
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"
                     /chromosome="6"
                     /map="6p"
                     /cell_line="cell lines HB01242, HB01243, HB01244 available
                     from the Human Biological Data Interchange (HBDI),
                     Philadelphia, PA"
                     /note="cloned from PCR amplification products"
     gene            1. .252
                     /gene="HLA-DPB1"
     CDS             <1. .>252
                     /gene="HLA-DPB1"
                     /codon_start=1
                     /product="MHC class II antigen HLA-DP-beta"
                     /protein_id="AAB52511.1"
                     /db_xref="GI:903974"
                     /translation="NYLFQGRQECYAFNGTQRFLERYIYNREEFVRFDSDVGEFRAVT
                     ELGRPDEEYWNSQKDLLEEKRAVPDRMCRHNYELGGPMTL"

  Query Match              0.8%;  Score 22.4;  DB 1;  Length 252;
  Best Local Similarity   51.0%;  Pred. No. 27;
  Matches   53;  Conservative    0;  Mismatches   51;  Indels    0;  Gaps    0;

Qy       292 AGGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCAGGCCCAATGA 351
             | |||  ||    ||||  ||||  | |    | ||     ||| || |||||  ||    |
Db       149 ATGAGGAGTACTGGAACAGCCAGAAGGACCTCCTGGAGGAGAAGCGGGCAGTGCCGGACA 208

Qy       352 TCATGTGGTCAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAG 395
               |||||   |  |  ||  |  | ||   ||||   |  || |
Db       209 GGATGTGCAGACACAACTACGAGCTGGGCGGGCCCATGACCCTG 252


RESULT 46
HSU59442
LOCUS       HSU59442                 255 bp    DNA     linear   PRI 18-SEP-2001
DEFINITION  Human MHC class II antigen DPbeta1 gene (DPB1*5901 allele), partial
            cds.
ACCESSION   U59442
VERSION     U59442.1  GI:4097404
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 255)
  AUTHORS   Noreen,H., Steiner,L., Davidson,M., Johnson,S., Segall,M. and
            Begovich,A.B.
  TITLE     Six new DPB1 alleles identified in a study of 1,302 unrelated bone
            marrow donor-recipient pairs
  JOURNAL   Tissue Antigens 49 (5), 512-516 (1997)
  MEDLINE   97316872
   PUBMED   9174146
REFERENCE   2  (bases 1 to 255)
  AUTHORS   Steiner,L., Begovich,A. and Noreen,H.
  TITLE     Direct Submission
  JOURNAL   Submitted (29-MAY-1996) Human Genetics, Roche Molecular Systems,
            1145 Atlantic Avenue, Alameda, CA 94501, USA
FEATURES             Location/Qualifiers
     source          1. .255
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"
                     /chromosome="6"
     gene            1. .255
                     /gene="HLA-DPB1"
     CDS             <1. .>255
                     /gene="HLA-DPB1"
                     /note="Allele: DPB1*5901"
                     /codon_start=1
                     /product="MHC class II antigen DPbeta1"
                     /protein_id="AAD09486.1"
                     /db_xref="GI:4097405"
                     /translation="NYLFQGRQECYAFNGTQRFLERYIYNREEFVRFDSDVGEFRAVT
                     ELGRPDEEYWNSQKDLLEEKRAVPDRMCRHNYELGGPMTLQ"

  Query Match              0.8%;  Score 22.4;  DB 1;  Length 255;
  Best Local Similarity   51.0%;  Pred. No. 27;
  Matches   53;  Conservative    0;  Mismatches   51;  Indels    0;  Gaps    0;

Qy       292 AGGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCAGGCCCAATGA 351
             | |||  ||    ||||  ||||  | |    | ||     ||| || |||||  ||    |
Db       149 ATGAGGAGTACTGGAACAGCCAGAAGGACCTCCTGGAGGAGAAGCGGGCAGTGCCGGACA 208

Qy       352 TCATGTGGTCAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAG 395
               |||||   |  |  ||  |  | ||   ||||   |  || |
Db       209 GGATGTGCAGACACAACTACGAGCTGGGCGGGCCCATGACCCTG 252


RESULT 47
HUMMHCD21A
LOCUS       HUMMHCD21A               260 bp    DNA     linear   PRI 07-JAN-1995
DEFINITION  Human major histocompatibility complex class II (HLA-DPB21) gene,
            exon 2.
ACCESSION   M84617
VERSION     M84617.1  GI:187834
KEYWORDS    cell surface glycoprotein; class II gene; integral membrane
            protein; major histocompatibility complex.
```

```
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 260)
  AUTHORS   Begovich,A.B., Moonsamey,P., Suraj,V., Bugawan,T.L., Stoneking,M.,
            Roudier,J. and Hills,A.V.S.
  TITLE     Genetic diversity within the HLA class II region: ten new DPB1
            alleles and their population distribution
  JOURNAL   Immunogenetics 40, 153-157 (1992)
COMMENT     Original source text: Homo sapiens (individual_isolate Indonesian
            57) DNA.
FEATURES             Location/Qualifiers
     source          1. .260
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /isolate="Indonesian 57"
                     /db_xref="taxon:9606"
                     /map="6p21.3"
                     /haplotype="DPB21"
                     /cell_type="lymphocyte"
     gene            1. .260
                     /gene="HLA-DPB21"
     exon            1. .260
                     /gene="HLA-DPB21"
                     /number=2

  Query Match             0.8%;  Score 22.4;  DB 1;  Length 260;
  Best Local Similarity   51.0%;  Pred. No. 27;
  Matches   53;  Conservative    0;  Mismatches   51;  Indels    0;  Gaps    0;

Qy        292 AGGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCAGGCCCAATGA 351
              | ||| ||    |||| ||||  | |    | ||     ||| || |||||  ||    |
Db        154 ATGAGGAGTACTGGAACAGCCAGAAGGACCTCCTGGAGGAGAAGCGGGCAGTGCCGGACA 213

Qy        352 TCATGTGGTCAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAG 395
              |||||   |  |  ||  |  | ||   ||||   |  || |
Db        214 GGATGTGCAGACACAACTACGAGCTGGTCGGGCCCATGACCCTG 257


RESULT 48
HUMDPB1II
LOCUS       HUMDPB1II                285 bp    DNA     linear   PRI 07-NOV-1994
DEFINITION  Human MHC class II HLA-DP-beta1 (HLA-DPB1) gene, allele 2.
ACCESSION   L00599
VERSION     L00599.1  GI:181737
KEYWORDS    cell surface glycoprotein; class II gene; integral membrane
            glycoprotein; major histocompatibility complex; major
            histocompatibility complex class II.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 285)
  AUTHORS   Easteal,S. and Croft,L.
  TITLE     Two new HLA-DPB1 alleles from Java, Indonesia
  JOURNAL   Unpublished (1992)
COMMENT     Original source text: Homo sapiens blood DNA.
FEATURES             Location/Qualifiers
     source          1. .285
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"
                     /map="6p21.3"
                     /tissue_type="blood"
     gene            20. .283
                     /gene="HLA-DPB1"
     exon            20. .283
                     /gene="HLA-DPB1"
                     /note="G00-120-636"

  Query Match             0.8%;  Score 22.4;  DB 1;  Length 285;
  Best Local Similarity   51.0%;  Pred. No. 28;
  Matches   53;  Conservative    0;  Mismatches   51;  Indels    0;  Gaps    0;

Qy        292 AGGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCAGGCCCAATGA 351
              | ||| ||    |||| ||||  | |    | ||     ||| || |||||  ||    |
Db        170 ATGAGGAGTACTGGAACAGCCAGAAGGACCTCCTGGAGGAGAAGCGGGCAGTGCCGGACA 229

Qy        352 TCATGTGGTCAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAG 395
              |||||   |  |  ||  |  | ||   ||||   |  || |
Db        230 GGATGTGCAGACACAACTACGAGCTGGTCGGGCCCATGACCCTG 273


RESULT 49
AF336229
LOCUS       AF336229                 291 bp    DNA     linear   PRI 22-MAR-2001
DEFINITION  Homo sapiens MHC class II antigen (HLA-DPB1) gene, HLA-DPB1*5901
            allele, exon 2 and partial cds.
ACCESSION   AF336229
VERSION     AF336229.1  GI:13430239
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 291)
  AUTHORS   Liu,Z., Lin,J., Chen,W., Jia,Z., Pan,D. and Xu,A.
  TITLE     Sequence of complete exon 2 and partial intron 2 of HLA-DPB1*5901
            allele
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 291)
  AUTHORS   Liu,Z., Lin,J., Chen,W., Jia,Z., Pan,D. and Xu,A.
  TITLE     Direct Submission
  JOURNAL   Submitted (16-JAN-2001) Biochemistry Department, Zhongshan (Sun
            Yat-sen) University, 135 W. Xingang Rd, Guangzhou, Guangdong
            510275, P.R. China
FEATURES             Location/Qualifiers
     source          1. .291
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"
                     /chromosome="6"
                     /map="6p21.3"
     gene            <1. .>283
                     /gene="HLA-DPB1"
                     /allele="HLA-DPB1*5901"
     mRNA            <1. .>264
                     /gene="HLA-DPB1"
     CDS             <1. .>264
                     /gene="HLA-DPB1"
                     /codon_start=3
                     /product="MHC class II antigen"
                     /protein_id="AAK25784.1"
                     /db_xref="GI:13430240"
                     /translation="NYLFQGRQECYAFNGTQRFLERYIYNREEFVRFDSDVGEFRAVT
                     ELGRPDEEYWNSQKDLLEEKRAVPDRMCRHNYELGGPMTLQRR"
     exon            1. .264
                     /gene="HLA-DPB1"
                     /number=2

  Query Match             0.8%;  Score 22.4;  DB 1;  Length 291;
  Best Local Similarity   51.0%;  Pred. No. 28;
  Matches   53;  Conservative    0;  Mismatches   51;  Indels    0;  Gaps    0;

Qy        292 AGGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCAGGCCCAATGA 351
              | ||| ||    |||| ||||  | |    | ||     ||| || |||||  ||    |
Db        151 ATGAGGAGTACTGGAACAGCCAGAAGGACCTCCTGGAGGAGAAGCGGGCAGTGCCGGACA 210

Qy        352 TCATGTGGTCAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAG 395
              |||||   |  |  ||  |  | ||   ||||   |  || |
Db        211 GGATGTGCAGACACAACTACGAGCTGGGCGGGCCCATGACCCTG 254


RESULT 50
AF532184
```

```
LOCUS       AF532184                1341 bp    mRNA    linear   ROD 21-AUG-2002
DEFINITION  Rattus norvegicus coagulation factor VII mRNA, complete cds.
ACCESSION   AF532184
VERSION     AF532184.1  GI:22347744
KEYWORDS    .
SOURCE      Rattus norvegicus (Norway rat)
  ORGANISM  Rattus norvegicus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
            Rattus.
REFERENCE   1  (bases 1 to 1341)
  AUTHORS   Murphy,K. and Ramaker,M.
  TITLE     Nucleotide sequence of the cDNA encoding rat coagulation factor VII
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 1341)
  AUTHORS   Murphy,K. and Ramaker,M.
  TITLE     Direct Submission
  JOURNAL   Submitted (24-JUL-2002) Biotechnology, Bristol-Myers Squibb, P.O.
            Box 80336, Wilmingtion, DE 19880-0336, USA
FEATURES             Location/Qualifiers
     source          1. .1341
                     /organism="Rattus norvegicus"
                     /mol_type="mRNA"
                     /strain="Sprague-Dawley"
                     /db_xref="taxon:10116"
     CDS             1. .1341
                     /codon_start=1
                     /product="coagulation factor VII"
                     /protein_id="AAM95967.1"
                     /db_xref="GI:22347745"
                     /translation="MVPQTHGLLLLYFLLQLQGPLGAVVFITQEEAHGVLHRQRRANS
                     LLEELWSSSLERECNEERCSFEEAREIFKSPERTKQFWTIYSDGDQCASNPCQNGGTC
                     QDHLKSYVCFCPLDFEGRNCEKNKNEQLICANENGDCDQYCRDHVGTKRTCSCHEDYV
                     LQPDEVSCKPKVEYPCGRIPVVEKRNFSRPQGRIVGGYVCPKGECPWQAVLKFNEALL
                     CGAVLLDTRWIVTAAHCFDKFGKLVNITVVLGEHDFSEKEGTEQVRLVEQVIMPNKYT
                     RGRTDHDIALVRLHRPVTFTDYVVPLCLPERAFSENTLASIRFSRVSGWGQLLDRGAT
                     ALELMVIEVPRLMTQDCLEHAKHSANTPRITENMFCAGYMDGTKDACKGDSGGPHATH
                     YHGTWYLTGVVSWGEGCAAIGHIGVYTRVSQYIDWLVKYMDSKLRVGISRVSLL"

  Query Match             0.8%;  Score 22.2;  DB 1;  Length 1341;
  Best Local Similarity   61.0%;  Pred. No. 38;
  Matches   36;  Conservative    0;  Mismatches   23;  Indels    0;  Gaps    0;

Qy        434 GGTGATCACTCCTCTAGTGAAAGGTGGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGT 492
              ||||| |||  ||  ||||| | |  |||| |||||     | | | || ||   |||
Db        748 GGTGAACACGACTTCAGTGAGAAGGAGGGGACTGAGCAAGTACGGCTGGTGGAACAGGT 806


RESULT 51
AX265077/c
LOCUS       AX265077                121 bp    DNA     linear   PAT 26-OCT-2001
DEFINITION  Sequence 2468 from Patent WO0173002.
ACCESSION   AX265077
VERSION     AX265077.1  GI:16513876
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Kmiec,E.B., Gamper,H.B. and Rice,M.C.
  TITLE     Targeted chromosomal genomic alterations with modified single
            stranded oligonucleotides
  JOURNAL   Patent: WO 0173002-A 2468 04-OCT-2001;
            UNIVERSITY OF DELAWARE (US)
FEATURES             Location/Qualifiers
     source          1. .121
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.8%;  Score 22;  DB 1;  Length 121;
  Best Local Similarity   53.5%;  Pred. No. 32;
  Matches   46;  Conservative    0;  Mismatches   40;  Indels    0;  Gaps    0;

Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
              | |||  || | || ||    |    ||  ||   | |  |||  || |  |  |  |||
Db         87 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 28

Qy       2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
                ||||||  || || ||| ||  ||
Db         27 AATTGGCACGTAAACTGCTTAGAATG 2


RESULT 52
AX265078
LOCUS       AX265078                121 bp    DNA     linear   PAT 26-OCT-2001
DEFINITION  Sequence 2469 from Patent WO0173002.
ACCESSION   AX265078
VERSION     AX265078.1  GI:16513877
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Kmiec,E.B., Gamper,H.B. and Rice,M.C.
  TITLE     Targeted chromosomal genomic alterations with modified single
            stranded oligonucleotides
  JOURNAL   Patent: WO 0173002-A 2469 04-OCT-2001;
            UNIVERSITY OF DELAWARE (US)
FEATURES             Location/Qualifiers
     source          1. .121
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.8%;  Score 22;  DB 1;  Length 121;
  Best Local Similarity   53.5%;  Pred. No. 32;
  Matches   46;  Conservative    0;  Mismatches   40;  Indels    0;  Gaps    0;

Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
              | |||  || | || ||    |    ||  ||   | |  |||  || |  |  |  |||
Db         35 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 94

Qy       2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
                ||||||  || || ||| ||  ||
Db         95 AATTGGCACGTAAACTGCTTAGAATG 120


RESULT 53
AX265081/c
LOCUS       AX265081                121 bp    DNA     linear   PAT 26-OCT-2001
DEFINITION  Sequence 2472 from Patent WO0173002.
ACCESSION   AX265081
VERSION     AX265081.1  GI:16513880
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Kmiec,E.B., Gamper,H.B. and Rice,M.C.
  TITLE     Targeted chromosomal genomic alterations with modified single
            stranded oligonucleotides
  JOURNAL   Patent: WO 0173002-A 2472 04-OCT-2001;
            UNIVERSITY OF DELAWARE (US)
FEATURES             Location/Qualifiers
     source          1. .121
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.8%;  Score 22;  DB 1;  Length 121;
  Best Local Similarity   53.5%;  Pred. No. 32;
  Matches   46;  Conservative    0;  Mismatches   40;  Indels    0;  Gaps    0;
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```
Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
              | |||  ||  | ||  ||    |     ||  ||    | |  |||  ||  |  |   |||
Db         88 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 29

Qy       2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
                ||||||  ||  ||  |||  ||  ||
Db         28 AATTGGCACGTAAACTGCTTAGAATG 3
```

RESULT 54
AX265082
LOCUS AX265082 121 bp DNA linear PAT 26-OCT-2001
DEFINITION Sequence 2473 from Patent WO0173002.
ACCESSION AX265082
VERSION AX265082.1 GI:16513881
KEYWORDS .
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Kmiec,E.B., Gamper,H.B. and Rice,M.C.
TITLE Targeted chromosomal genomic alterations with modified single
stranded oligonucleotides
JOURNAL Patent: WO 0173002-A 2473 04-OCT-2001;
UNIVERSITY OF DELAWARE (US)
FEATURES Location/Qualifiers
source 1. .121
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.8%; Score 22; DB 1; Length 121;
Best Local Similarity 53.5%; Pred. No. 32;
Matches 46; Conservative 0; Mismatches 40; Indels 0; Gaps 0;

```
Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
              | |||  ||  | ||  ||    |     ||  ||    | |  |||  ||  |  |   |||
Db         34 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 93

Qy       2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
                ||||||  ||  ||  |||  ||  ||
Db         94 AATTGGCACGTAAACTGCTTAGAATG 119
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RESULT 55
AX265085/c
LOCUS AX265085 121 bp DNA linear PAT 26-OCT-2001
DEFINITION Sequence 2476 from Patent WO0173002.
ACCESSION AX265085
VERSION AX265085.1 GI:16513884
KEYWORDS .
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Kmiec,E.B., Gamper,H.B. and Rice,M.C.
TITLE Targeted chromosomal genomic alterations with modified single
stranded oligonucleotides
JOURNAL Patent: WO 0173002-A 2476 04-OCT-2001;
UNIVERSITY OF DELAWARE (US)
FEATURES Location/Qualifiers
source 1. .121
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.8%; Score 22; DB 1; Length 121;
Best Local Similarity 53.5%; Pred. No. 32;
Matches 46; Conservative 0; Mismatches 40; Indels 0; Gaps 0;

```
Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
              | |||  ||  | ||  ||    |     ||  ||    | |  |||  ||  |  |   |||
Db         89 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 30

Qy       2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
                ||||||  ||  ||  |||  ||  ||
Db         29 AATTGGCACGTAAACTGCTTAGAATG 4
```

RESULT 56
AX265086
LOCUS AX265086 121 bp DNA linear PAT 26-OCT-2001
DEFINITION Sequence 2477 from Patent WO0173002.
ACCESSION AX265086
VERSION AX265086.1 GI:16513885
KEYWORDS .
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Kmiec,E.B., Gamper,H.B. and Rice,M.C.
TITLE Targeted chromosomal genomic alterations with modified single
stranded oligonucleotides
JOURNAL Patent: WO 0173002-A 2477 04-OCT-2001;
UNIVERSITY OF DELAWARE (US)
FEATURES Location/Qualifiers
source 1. .121
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.8%; Score 22; DB 1; Length 121;
Best Local Similarity 53.5%; Pred. No. 32;
Matches 46; Conservative 0; Mismatches 40; Indels 0; Gaps 0;

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Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
              | |||  ||  | ||  ||    |     ||  ||    | |  |||  ||  |  |   |||
Db         33 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 92

Qy       2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
                ||||||  ||  ||  |||  ||  ||
Db         93 AATTGGCACGTAAACTGCTTAGAATG 118
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RESULT 57
AX265089/c
LOCUS AX265089 121 bp DNA linear PAT 26-OCT-2001
DEFINITION Sequence 2480 from Patent WO0173002.
ACCESSION AX265089
VERSION AX265089.1 GI:16513888
KEYWORDS .
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Kmiec,E.B., Gamper,H.B. and Rice,M.C.
TITLE Targeted chromosomal genomic alterations with modified single
stranded oligonucleotides
JOURNAL Patent: WO 0173002-A 2480 04-OCT-2001;
UNIVERSITY OF DELAWARE (US)
FEATURES Location/Qualifiers
source 1. .121
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.8%; Score 22; DB 1; Length 121;
Best Local Similarity 53.5%; Pred. No. 32;
Matches 46; Conservative 0; Mismatches 40; Indels 0; Gaps 0;

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Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
```

```
Db          86 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 27

Qy        2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
               ||||||  || || ||| ||  ||
Db          26 AATTGGCACGTAAACTGCTTAGAATG 1


RESULT 58
AX265090
LOCUS       AX265090                121 bp    DNA     linear   PAT 26-OCT-2001
DEFINITION  Sequence 2481 from Patent WO0173002.
ACCESSION   AX265090
VERSION     AX265090.1  GI:16513889
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Kmiec,E.B., Gamper,H.B. and Rice,M.C.
  TITLE     Targeted chromosomal genomic alterations with modified single
            stranded oligonucleotides
  JOURNAL   Patent: WO 0173002-A 2481 04-OCT-2001;
            UNIVERSITY OF DELAWARE (US)
FEATURES             Location/Qualifiers
     source          1. .121
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.8%;  Score 22;  DB 1;  Length 121;
  Best Local Similarity   53.5%;  Pred. No. 32;
  Matches   46;  Conservative    0;  Mismatches   40;  Indels    0;  Gaps    0;

Qy        2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
               | |||  || | || ||   |    ||  ||   | |  |||  || |  |  |   |||
Db          36 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 95

Qy        2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
               ||||||  || || ||| ||  ||
Db          96 AATTGGCACGTAAACTGCTTAGAATG 121


RESULT 59
AX265093/c
LOCUS       AX265093                121 bp    DNA     linear   PAT 26-OCT-2001
DEFINITION  Sequence 2484 from Patent WO0173002.
ACCESSION   AX265093
VERSION     AX265093.1  GI:16513892
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Kmiec,E.B., Gamper,H.B. and Rice,M.C.
  TITLE     Targeted chromosomal genomic alterations with modified single
            stranded oligonucleotides
  JOURNAL   Patent: WO 0173002-A 2484 04-OCT-2001;
            UNIVERSITY OF DELAWARE (US)
FEATURES             Location/Qualifiers
     source          1. .121
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.8%;  Score 22;  DB 1;  Length 121;
  Best Local Similarity   53.5%;  Pred. No. 32;
  Matches   46;  Conservative    0;  Mismatches   40;  Indels    0;  Gaps    0;

Qy        2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
               | |||  || | || ||   |    ||  ||   | |  |||  || |  |  |   |||
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```
Db          86 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 27

Qy        2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
               ||||||  || || ||| ||  ||
Db          26 AATTGGCACGTAAACTGCTTAGAATG 1


RESULT 60
AX265094
LOCUS       AX265094                121 bp    DNA     linear   PAT 26-OCT-2001
DEFINITION  Sequence 2485 from Patent WO0173002.
ACCESSION   AX265094
VERSION     AX265094.1  GI:16513893
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Kmiec,E.B., Gamper,H.B. and Rice,M.C.
  TITLE     Targeted chromosomal genomic alterations with modified single
            stranded oligonucleotides
  JOURNAL   Patent: WO 0173002-A 2485 04-OCT-2001;
            UNIVERSITY OF DELAWARE (US)
FEATURES             Location/Qualifiers
     source          1. .121
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.8%;  Score 22;  DB 1;  Length 121;
  Best Local Similarity   53.5%;  Pred. No. 32;
  Matches   46;  Conservative    0;  Mismatches   40;  Indels    0;  Gaps    0;

Qy        2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
               | |||  || | || ||   |    ||  ||   | |  |||  || |  |  |   |||
Db          36 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 95

Qy        2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
               ||||||  || || ||| ||  ||
Db          96 AATTGGCACGTAAACTGCTTAGAATG 121


RESULT 61
AX265073/c
LOCUS       AX265073                121 bp    DNA     linear   PAT 26-OCT-2001
DEFINITION  Sequence 2464 from Patent WO0173002.
ACCESSION   AX265073
VERSION     AX265073.1  GI:16513872
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Kmiec,E.B., Gamper,H.B. and Rice,M.C.
  TITLE     Targeted chromosomal genomic alterations with modified single
            stranded oligonucleotides
  JOURNAL   Patent: WO 0173002-A 2464 04-OCT-2001;
            UNIVERSITY OF DELAWARE (US)
FEATURES             Location/Qualifiers
     source          1. .121
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.8%;  Score 22;  DB 1;  Length 121;
  Best Local Similarity   53.5%;  Pred. No. 32;
  Matches   46;  Conservative    0;  Mismatches   40;  Indels    0;  Gaps    0;

Qy        2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
               | |||  || | || ||   |    ||  ||   | |  |||  || |  |  |   |||
Db          91 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 32
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Qy       2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
                ||||||  || || ||| ||  ||
Db         31 AATTGGCACGTAAACTGCTTAGAATG 6


RESULT 62
AX265074
LOCUS       AX265074                121 bp    DNA     linear   PAT 26-OCT-2001
DEFINITION  Sequence 2465 from Patent WO0173002.
ACCESSION   AX265074
VERSION     AX265074.1  GI:16513873
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Kmiec,E.B., Gamper,H.B. and Rice,M.C.
  TITLE     Targeted chromosomal genomic alterations with modified single
            stranded oligonucleotides
  JOURNAL   Patent: WO 0173002-A 2465 04-OCT-2001;
            UNIVERSITY OF DELAWARE (US)
FEATURES             Location/Qualifiers
     source          1. .121
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.8%;  Score 22;  DB 1;  Length 121;
  Best Local Similarity   53.5%;  Pred. No. 32;
  Matches   46;  Conservative    0;  Mismatches   40;  Indels    0;  Gaps    0;

Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
              | |||  || | || ||   |    ||  ||   | |  |||  || | |  |   |||
Db         31 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 90

Qy       2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
                ||||||  || || ||| ||  ||
Db         91 AATTGGCACGTAAACTGCTTAGAATG 116


RESULT 63
HUMKALR4/c
LOCUS       HUMKALR4                193 bp    DNA     linear   PRI 06-JAN-1995
DEFINITION  Human renal kallikrein, exon 4.
ACCESSION   M33108
VERSION     M33108.1  GI:186648
KEYWORDS    kallikrein; kininogenase.
SEGMENT     4 of 5
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 193)
  AUTHORS   Evans,B.A., Yun,Z.X., Close,J.A., Tregear,G.W., Kitamura,N.,
            Nakanishi,S., Callen,D.F., Baker,E., Hyland,V.J., Sutherland,G.R.
            and Richards,R.I.
  TITLE     Structure and chromosomal localization of the human renal
            kallikrein gene
  JOURNAL   Biochemistry 27 (9), 3124-3129 (1988)
  MEDLINE   88269498
   PUBMED   2898948
COMMENT     Original source text: Human parotid gland, cDNA to mRNA.
FEATURES             Location/Qualifiers
     source          1. .193
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"
                     /map="19q13.3"
     prim_transcript <1. .>193
                     /gene="KLK1"
                     /note="kallikrein mRNA and introns"
     intron          <1. .>29
                     /gene="KLK1"
                     /note="kallikrein intron C"
     exon            30. .166
                     /gene="KLK1"
                     /note="G00-120-118"
                     /number=4
     intron          167. .>193
                     /gene="KLK1"
                     /note="kallikrein intron D"

  Query Match             0.8%;  Score 22;  DB 1;  Length 193;
  Best Local Similarity   67.4%;  Pred. No. 34;
  Matches   31;  Conservative    0;  Mismatches   15;  Indels    0;  Gaps    0;

Qy       1389 GTAGGTTGTCTTTTTTGGATGCAGCAGTAGGATGGATCTTGTTTTC 1434
              | | || | |||||||| |  || || ||||  |||| |||   ||
Db        104 GGACGTGGGCTTTTTTGCACTCATCATTAGGCAGGATTTTGAGGTC 59


RESULT 64
HUMFIXG3/c
LOCUS       HUMFIXG3                240 bp    DNA     linear   PRI 01-DEC-1994
DEFINITION  Human factor IX gene, exon 4.
ACCESSION   K02050
VERSION     K02050.1  GI:182616
KEYWORDS    Christmas factor; factor IX.
SEGMENT     3 of 6
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 240)
  AUTHORS   Anson,D.S., Choo,K.H., Rees,D.J., Giannelli,F., Gould,K.,
            Huddleston,J.A. and Brownlee,G.G.
  TITLE     The gene structure of human anti-haemophilic factor IX
  JOURNAL   EMBO J. 3 (5), 1053-1060 (1984)
  MEDLINE   84236100
   PUBMED   6329734
COMMENT     Original source text: Human: cDNA to liver mRNA, clones cVII, cVI,
            108.1, and DB.1; 4X lymphoblastoid cell line (GM1416B) DNA, clone
            lambda-HIX-4; genomic DNA library of Lawn et al., clones
            lambda-HIX-1,2,3.
            See segment 1.
FEATURES             Location/Qualifiers
     source          1. .240
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"
                     /map="Xq26.3-q27.1"
     prim_transcript <1. .>240
                     /gene="F9"
                     /note="fix mRNA"
     intron          <1. .64
                     /gene="F9"
                     /note="fix intron 3"
     exon            65. .178
                     /gene="F9"
                     /note="G00-119-900"
                     /number=4
     intron          179. .>240
                     /gene="F9"
                     /note="fix intron 4"

  Query Match             0.8%;  Score 22;  DB 1;  Length 240;
  Best Local Similarity   53.5%;  Pred. No. 35;
  Matches   46;  Conservative    0;  Mismatches   40;  Indels    0;  Gaps    0;

Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
              | |||  || | || ||   |    ||  ||   | |  |||  || | |  |   |||
Db        101 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 42

Qy       2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
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                 ||||||  || ||  ||| ||  ||
Db         41 AATTGGCACGTAAACTGCTTAGAATG 16


RESULT 65
AX892787/c
LOCUS       AX892787                385 bp    DNA     linear   PAT 18-DEC-2003
DEFINITION  Sequence 8650 from Patent EP1033401.
ACCESSION   AX892787
VERSION     AX892787.1  GI:40047671
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Dumas Milne Edwards,J.B., Duclert,A. and Giordano,J.Y.
  TITLE     Expressed sequence tags and encoded human proteins
  JOURNAL   Patent: EP 1033401-A 8650 06-SEP-2000;
            Genset (FR)
FEATURES             Location/Qualifiers
     source          1. .385
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.8%;  Score 22;  DB 1;  Length 385;
  Best Local Similarity   57.1%;  Pred. No. 37;
  Matches   40;  Conservative    0;  Mismatches   30;  Indels    0;  Gaps    0;

Qy        653 TCTCTCTCTCCCTTTCTCTAACACTTCTGGGCCAGGGTAGGGGCACTACCGCATTCCCTC 712
              ||||  | |||||   |||  ||| | |  | |  |   ||||||||  |  || | |  |
Db        135 TCTCACACTCCCAGCCTCCCACAATCCGAGACTGGATGAGGGGCACGGCACCAGTGCACC 76

Qy        713 TCTCTTCCAA 722
                | |   |||
Db         75 CCACAGACAA 66


RESULT 66
BD028320/c
LOCUS       BD028320                385 bp    DNA     linear   PAT 27-AUG-2002
DEFINITION  Sequence tag and encoded human protein.
ACCESSION   BD028320
VERSION     BD028320.1  GI:22570062
KEYWORDS    JP 2001269182-A/4566.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 385)
  AUTHORS   Edwards,J.B.D.M., Duclair,E. and Jordan,J.Y.
  TITLE     Sequence tag and encoded human protein
  JOURNAL   Patent: JP 2001269182-A 4566 02-OCT-2001;
            GENSET
COMMENT     OS   Homo sapiens (human)
            PN   JP 2001269182-A/4566
            PD   02-OCT-2001
            PF   24-FEB-2000 JP 2000118773
            PR   26-FEB-1999 US    60/122487
            PI   JEAN BAPUTIST DUMAS MILNE EDWARDS,EIMERIC DUCLAIR,JEAN YVES
            PI   JORDAN
            PC   C12N15/09,C07K14/435,C07K16/18,C12N1/15,C12N1/19,C12N1/21, PC
             C12N5/10,
            PC   C12P21/02,C12P21/08,C12Q1/68//G06F17/30,C12N15/00,C12N5/00, PC
              G06F15/40
            CC
            FH   Key             Location/Qualifiers.
FEATURES             Location/Qualifiers
     source          1. .385
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"

  Query Match             0.8%;  Score 22;  DB 1;  Length 385;
  Best Local Similarity   57.1%;  Pred. No. 37;
  Matches   40;  Conservative    0;  Mismatches   30;  Indels    0;  Gaps    0;

Qy        653 TCTCTCTCTCCCTTTCTCTAACACTTCTGGGCCAGGGTAGGGGCACTACCGCATTCCCTC 712
              ||||  | |||||   |||  ||| | |  | |  |   ||||||||  |  || | |  |
Db        135 TCTCACACTCCCAGCCTCCCACAATCCGAGACTGGATGAGGGGCACGGCACCAGTGCACC 76

Qy        713 TCTCTTCCAA 722
                | |   |||
Db         75 CCACAGACAA 66


RESULT 67
AX839163/c
LOCUS       AX839163                409 bp    DNA     linear   PAT 15-DEC-2003
DEFINITION  Sequence 6 from Patent WO03076610.
ACCESSION   AX839163
VERSION     AX839163.1  GI:39922612
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Bracco,L., Brinkman,B. and Coignard,F.
  TITLE     Variants of human kallikrein-2 and kallikrein-3 and uses thereof
  JOURNAL   Patent: WO 03076610-A 6 18-SEP-2003;
            Exonhit Therapeutics S.A. (FR)
FEATURES             Location/Qualifiers
     source          1. .409
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.8%;  Score 22;  DB 1;  Length 409;
  Best Local Similarity   57.1%;  Pred. No. 37;
  Matches   40;  Conservative    0;  Mismatches   30;  Indels    0;  Gaps    0;

Qy        653 TCTCTCTCTCCCTTTCTCTAACACTTCTGGGCCAGGGTAGGGGCACTACCGCATTCCCTC 712
              ||||  | |||||   |||  ||| | |  | |  |   ||||||||  |  || | |  |
Db        108 TCTCACACTCCCAGCCTCCCACAATCCGAGACTGGATGAGGGGCACGGCACCAGTGCACC 49

Qy        713 TCTCTTCCAA 722
                | |   |||
Db         48 CCACAGACAA 39


RESULT 68
AF306920
LOCUS       AF306920                274 bp    DNA     linear   VRT 23-JAN-2001
DEFINITION  Brachyramphus brevirostris haplotype KMH ribosomal protein 40 gene,
            intron 5 and partial sequence.
ACCESSION   AF306920
VERSION     AF306920.1  GI:12382292
KEYWORDS    .
SOURCE      Brachyramphus brevirostris
  ORGANISM  Brachyramphus brevirostris
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Archosauria; Aves; Neognathae; Charadriiformes; Alcidae;
            Brachyramphus.
REFERENCE   1  (bases 1 to 274)
  AUTHORS   Pacheco,N.M. and Friesen,V.L.
  TITLE     A molecular investigation of hybridization in Brachyramphus
            murrelets
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 274)
  AUTHORS   Pacheco,N.M. and Friesen,V.L.
  TITLE     Direct Submission
  JOURNAL   Submitted (21-SEP-2000) Department of Biology, Queen's University,
            Kingston, ON K7L 3N6, Canada
FEATURES             Location/Qualifiers
```

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     source          1. .274
                     /organism="Brachyramphus brevirostris"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:28693"
                     /haplotype="KMH"
     mRNA            join(<1. .14,258. .>274)
                     /product="ribosomal protein 40"
                     /note="coding region not determined"
     intron          15. .257
                     /number=5

  Query Match              0.8%;  Score 21.8;  DB 1;  Length 274;
  Best Local Similarity   52.8%;  Pred. No. 40;
  Matches   47;  Conservative    0;  Mismatches   42;  Indels    0;  Gaps    0;

Qy       1542 ACTTGTGAAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1601
             | |  ||  ||  ||  ||||||||      || ||||   ||||  |   ||| |
Db        154 AGTCTTGTCGTTGGTTGGTGTGTGTTGTCTGGTATGTGATAGTGTAGGGTGGTGAGGTGT 213

Qy       1602 TGTGTGTGTGTGTCTGTGTCTGTGTCTTG 1630
                 |   ||| | | ||  | || | | |||
Db        214 TTCCGGTGGGAGACTTAGGCTTTCTGTTG 242


RESULT 69
AX375740/c
LOCUS       AX375740               786 bp    DNA     linear   PAT 01-MAR-2002
DEFINITION  Sequence 1 from Patent WO0198466.
ACCESSION   AX375740
VERSION     AX375740.1  GI:19170260
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Xiao,Y.
  TITLE     Regulation of human prostasin-like serine protease
  JOURNAL   Patent: WO 0198466-A 1 27-DEC-2001;
            Bayer Aktiengesellschaft (DE)
FEATURES             Location/Qualifiers
     source          1. .786
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match              0.8%;  Score 21.6;  DB 1;  Length 786;
  Best Local Similarity   53.6%;  Pred. No. 51;
  Matches   45;  Conservative    0;  Mismatches   39;  Indels    0;  Gaps    0;

Qy        361 CAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGGCA 420
              |||  ||| |  | ||||||| | |    ||  ||  ||| |  | ||  |||| |
Db        683 CAGCTCCCAGACTGCAGGCAGGTCAGAGGTCCCCCAGAATCACCCTGGCAGGCGTCCTTG 624

Qy        421 GGGCCATGGCTCTGGTGATCACTC 444
               |||| |||   | |    ||| |
Db        623 TGGCCCTGGGGGTAGCCGGCACAC 600


RESULT 70
AF011898/c
LOCUS       AF011898               860 bp    mRNA    linear   VRT 09-SEP-1997
DEFINITION  Petromyzon marinus trypsinogen a2 (TRYPA2) mRNA, complete cds.
ACCESSION   AF011898
VERSION     AF011898.1  GI:2367494
KEYWORDS    .
SOURCE      Petromyzon marinus (sea lamprey)
  ORGANISM  Petromyzon marinus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Hyperoartia;
            Petromyzontiformes; Petromyzontidae; Petromyzon.
REFERENCE   1  (bases 1 to 860)
  AUTHORS   Roach,J.C.
  TITLE     The Molecular Evolution of the Vertebrate Trypsinogens
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 860)
  AUTHORS   Roach,J.C.
  TITLE     Direct Submission
  JOURNAL   Submitted (01-JUL-1997) Molecular Biotechnology, University of
            Washington, Seattle, WA 98195, USA
FEATURES             Location/Qualifiers
     source          1. .860
                     /organism="Petromyzon marinus"
                     /mol_type="mRNA"
                     /db_xref="taxon:7757"
                     /dev_stage="ammocoete"
                     /tissue_lib="anterior intestine"
     gene            1. .860
                     /gene="TRYPA2"
     CDS             6. .749
                     /gene="TRYPA2"
                     /codon_start=1
                     /product="trypsinogen a2"
                     /protein_id="AAB69654.1"
                     /db_xref="GI:2367495"
                     /translation="MHGLILALLVGVAAAAPYMYEDHIVGGSECAAHSQPWQVSLNIG
                     YHFCGGSLINSQWVVSAAHCYQTASRISVRIGEHNIFVNEGTEQQIQASKAIQHPQYN
                     SWTIDNDIMLIKLSSPATLNQYAQAIALPSSCVNTGVMCTISGWGETQTSIGSPDVLM
                     CVQAPVLSDTSCRNSYPGDITNNMICLGYLEGGKDSCQGDSGGPVVCNGELQGIVSWG
                     RGCALPNYPGVYTKVCNYNAWIAQTIAAN"
     sig_peptide     6. .50
                     /gene="TRYPA2"
                     /evidence=not_experimental
     mat_peptide     51. .746
                     /gene="TRYPA2"
                     /product="trypsin a2"

  Query Match              0.8%;  Score 21.6;  DB 1;  Length 860;
  Best Local Similarity   68.2%;  Pred. No. 52;
  Matches   30;  Conservative    0;  Mismatches   14;  Indels    0;  Gaps    0;

Qy       1988 TTTTAATATTCTTTCTTTGTTCTATACTTTTAGTGATTTGATTA 2031
              ||||  | || ||| | || |  | | ||||| | ||||| |||
Db        860 TTTTTTTTTTTTTTATATGGTTCACATTTTTATTCATTTGGTTA 817


RESULT 71
AF011352/c
LOCUS       AF011352               861 bp    mRNA    linear   VRT 11-JUN-2001
DEFINITION  Petromyzon marinus trypsinogen A1 mRNA, complete cds.
ACCESSION   AF011352
VERSION     AF011352.1  GI:2293477
KEYWORDS    .
SOURCE      Petromyzon marinus (sea lamprey)
  ORGANISM  Petromyzon marinus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Hyperoartia;
            Petromyzontiformes; Petromyzontidae; Petromyzon.
REFERENCE   1  (bases 1 to 861)
  AUTHORS   Roach,J.C.
  TITLE     The molecular evolution of the vertebrate trypsinogense
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 861)
  AUTHORS   Roach,J.C.
  TITLE     Direct Submission
  JOURNAL   Submitted (25-JUN-1997) Molecular Biotechnology, University of
            Washington, Seattle, WA 98185, USA
FEATURES             Location/Qualifiers
     source          1. .861
                     /organism="Petromyzon marinus"
                     /mol_type="mRNA"
                     /db_xref="taxon:7757"
                     /tissue_type="anterior intestine"
                     /dev_stage="ammocoete"
     CDS             6. .749
                     /codon_start=1
                     /product="trypsinogen A1"
                     /protein_id="AAB65411.1"
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                     /db_xref="GI:2293478"
                     /translation="MHGLILALLVGVAAAAPYMYEDHIVGGSECAAHSQPWQVSLNIG
                     YHFCGGSLINSQWVVSAAHCYQTASRISVRIGEHNIFVNEGTEQQIQASKAIQHPQYN
                     SWTIDNDIMLIKLSSPATLNQYAQAIALPSSCVNTGVMCTISGWGETQTSVGSPDVLM
                     CVQAPVLSDTSCRNSYPGDITNNMICLGYLEGGKDSCQGDSGGPVVCNGELQGIVSWG
                     RGCALPNYPGVYTKVCNYNAWIAQTIAAN"
     sig_peptide     6. .50
                     /evidence=not_experimental
     mat_peptide     51. .746
                     /product="trypsin A1"
                     /evidence=not_experimental

  Query Match              0.8%;  Score 21.6;  DB 1;  Length 861;
  Best Local Similarity   68.2%;  Pred. No. 52;
  Matches   30;  Conservative    0;  Mismatches   14;  Indels    0;  Gaps    0;

Qy       1988 TTTTAATATTCTTTCTTTGTTCTATACTTTTAGTGATTTGATTA 2031
              ||||  | || ||| | || |  | | ||||| | ||||| |||
Db        860 TTTTTTTTTTTTTTATATGGTTCACATTTTTATTCATTTGGTTA 817


RESULT 72
AX375744/c
LOCUS       AX375744                 944 bp    DNA     linear   PAT 01-MAR-2002
DEFINITION  Sequence 5 from Patent WO0198466.
ACCESSION   AX375744
VERSION     AX375744.1  GI:19170262
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Xiao,Y.
  TITLE     Regulation of human prostasin-like serine protease
  JOURNAL   Patent: WO 0198466-A 5 27-DEC-2001;
            Bayer Aktiengesellschaft (DE)
FEATURES             Location/Qualifiers
     source          1. .944
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match              0.8%;  Score 21.6;  DB 1;  Length 944;
  Best Local Similarity   53.6%;  Pred. No. 52;
  Matches   45;  Conservative    0;  Mismatches   39;  Indels    0;  Gaps    0;

Qy        361 CAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGGCA 420
              |||  ||| |  | |||||| | |   ||  ||  ||| |  | ||  |||| |
Db        695 CAGCTCCCAGACTGCAGGCAGGTCAGAGGTCCCCCAGAATCACCCTGGCAGGCGTCCTTG 636

Qy        421 GGGCCATGGCTCTGGTGATCACTC 444
              ||||  |||   | |    ||| |
Db        635 TGGCCCTGGGGGTAGCCGGCACAC 612


RESULT 73
AX823252/c
LOCUS       AX823252                1020 bp    DNA     linear   PAT 11-DEC-2003
DEFINITION  Sequence 25 from Patent WO02068647.
ACCESSION   AX823252
VERSION     AX823252.1  GI:39749845
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   .
  JOURNAL   Patent: WO 02068647-A 25 06-SEP-2002;
            Curagen Corporation (US)
FEATURES             Location/Qualifiers
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                     /organism="Homo sapiens"
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Qy        361 CAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGGCA 420
              |||  ||| |  | |||||| | |   ||  ||  ||| |  | ||  |||| |
Db        818 CAGCTCCCAGACTGCAGGCAGGTCAGAGGTCCCCCAGAATCACCCTGGCAGGCGTCCTTG 759

Qy        421 GGGCCATGGCTCTGGTGATCACTC 444
              ||||  |||   | |    ||| |
Db        758 TGGCCCTGGGGGTAGCCGGCACAC 735


RESULT 74
AR410811/c
LOCUS       AR410811                 1378 bp    DNA     linear   PAT 18-DEC-2003
DEFINITION  Sequence 262 from patent US 6635468.
ACCESSION   AR410811
VERSION     AR410811.1  GI:40162311
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 1378)
  AUTHORS   Ashkenazi,A., Botstein,D., Desnoyers,L., Eaton,D.L., Ferrara,N.,
            Filvaroff,E., Fong,S., Gao,W.-Q., Gerber,H., Gerritsen,M.E.,
            Goddard,A., Godowski,P.J., Grimaldi,J.C., Gurney,A.L., Hillan,K.J.,
            Kljavin,I.J., Mather,J.P., Pan,J., Paoni,N.F., Roy,M.A.,
            Stewart,T.A., Tumas,D., Williams,P.M. and Wood,W.I.
  TITLE     Secreted and transmembrane polypeptides and nucleic acids encoding
            the same
  JOURNAL   Patent: US 6635468-A 262 21-OCT-2003;
FEATURES             Location/Qualifiers
     source          1. .1378
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match              0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 54;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   |  | | | | | | |||  |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32


RESULT 75
AX697671/c
LOCUS       AX697671                 1378 bp    DNA     linear   PAT 02-APR-2003
DEFINITION  Sequence 262 from Patent WO0104311.
ACCESSION   AX697671
VERSION     AX697671.1  GI:29498757
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Ashkenazi,A.J., Botstein,D., Desnoyers,L., Eaton,D.L., Ferrara,N.,
            Filvaroff,E., Fong,S., Gao,W.Q., Gerber,H., Gerritsen,M.E.,
            Goddard,A., Godowski,P.J., Grimaldi,C.J., Gurney,A.L., Hillan,K.J.,
            Kljavin,I.J., Mather,J.P., Pan,J., Paoni,N.F., Roy,M.A.,
            Stewart,T.A., Tumas,D., Williams,P.M. and Wood,W.I.
  TITLE     Secreted and transmembrane polypeptides and nucleic acids encoding
            the same
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  JOURNAL   Patent: WO 0104311-A 262 18-JAN-2001;
            Genentech Inc. (US)
FEATURES             Location/Qualifiers
     source          1. .1378
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 54;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   | | | | | | | || |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32


RESULT 76
BD075581/c
LOCUS       BD075581               1378 bp    DNA     linear   PAT 27-AUG-2002
DEFINITION  Secretory and transmembrane polypeptide and nucleic acid encoding
            the same.
ACCESSION   BD075581
VERSION     BD075581.1  GI:22621184
KEYWORDS    JP 2001516580-A/214.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 1378)
  AUTHORS   Wood,W.I., Gurney,A.L., Goddard,A., Penica,D., Chen,J. and Yuan,J.
  TITLE     Secretory and transmembrane polypeptide and nucleic acid encoding
            the same
  JOURNAL   Patent: JP 2001516580-A 214 02-OCT-2001;
            GENENTECH INC
COMMENT     OS   Homo sapiens (human)
            PN   JP 2001516580-A/214
            PD   02-OCT-2001
            PF   16-SEP-1998 JP 2000511867
            PR   17-SEP-1997 US    60/059115,17-SEP-1997 US    60/059184 PR
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            17-SEP-1997 US    60/059113,17-SEP-1997 US    60/059121 PR
            17-SEP-1997 US    60/059119,18-SEP-1997 US    60/059263 PR
            18-SEP-1997 US    60/059266,15-OCT-1997 US    60/062125 PR
            17-OCT-1997 US    60/062287,17-OCT-1997 US    60/062285 PR
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            03-NOV-1997 US    60/064248,07-NOV-1997 US    60/064809 PR
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            18-NOV-1997 US    60/065693,21-NOV-1997 US    60/066120 PR
            21-NOV-1997 US    60/066364,24-NOV-1997 US    60/066772 PR
            24-NOV-1997 US    60/066466,24-NOV-1997 US    60/066770 PR
            24-NOV-1997 US    60/066511,24-NOV-1997 US    60/066453 PR
            25-NOV-1997 US    60/066840
            PI   WILLIAM I WOOD,AUSTIN L GURNEY,AUDLEY GODDARD,DIANE PENICA, PI
              JEAN CHEN,
            PI   JEAN YUAN
            PC   C12N15/09,C07K14/47,C07K14/705,C07K16/18,C07K16/28,C07K19/00,
            PC   C12N1/19,
            PC   C12N1/21,C12N5/10,C12P21/02,C12P21/08,C12Q1/02//(C12P21/08, PC
              C12R1:91),
            PC   C12N15/00,C12N5/00
            CC   Secretory and transmembrane polypeptide and nucleic acid  CC
                 encoding the same
            FH   Key             Location/Qualifiers
            FT   source          1. .1378
            FT                   /organism='Homo sapiens (human)'.
FEATURES             Location/Qualifiers
     source          1. .1378
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                     /mol_type="genomic DNA"
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  Query Match             0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 54;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
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Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32


RESULT 77
BD172441/c
LOCUS       BD172441               1378 bp    DNA     linear   PAT 18-FEB-2003
DEFINITION  Secreted and transmembrane polypeptides and nucleic acids encoding
            the same.
ACCESSION   BD172441
VERSION     BD172441.1  GI:28413741
KEYWORDS    JP 2002223786-A/214.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 1378)
  AUTHORS   Wood,W.I., Gurney,A.L., Goddard,A., Pennica,D., Zheng,J. and
            Yuan,J.
  TITLE     Secreted and transmembrane polypeptides and nucleic acids encoding
            the same
  JOURNAL   Patent: JP 2002223786-A 214 13-AUG-2002;
            GENENTECH INC
COMMENT     OS   Homo sapiens (human)
            PN   JP 2002223786-A/214
            PD   13-AUG-2002
            PF   18-DEC-2001 JP 2001385135
            PR   17-SEP-1997 US    60/059115,17-SEP-1997 US    60/059184 PR
            17-SEP-1997 US    60/059122,17-SEP-1997 US    60/059117 PR
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            31-OCT-1997 US    60/063870,03-NOV-1997 US    60/064248 PR
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24-NOV-1997 US 60/066453,25-NOV-1997 US 60/066840 PI
WILLIAM I WOOD,AUSTIN L GURNEY,AUDREY GODDARD,DIANE PENNICA, PI
JIAN ZHENG,
PI JEAN YUAN
PC C12N15/09,C07K14/47,C07K16/18,C07K19/00,C12N1/19,C12N1/21, PC
C12N5/10,
PC
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(C12P21/02,C12R1:645),C12N15/00,C12N5/00
CC Secreted and transmembrane polypeptides and nucleic CC acids
encoding the same
FH Key Location/Qualifiers
FT source 1. .1378
FT /organism='Homo sapiens (human)'.

FEATURES Location/Qualifiers
source 1. .1378
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 54;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

Qy 399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
Db 131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy 459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
Db 71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32

RESULT 78
BD172760/c
LOCUS BD172760 1378 bp DNA linear PAT 18-FEB-2003
DEFINITION Secreted and transmembrane polypeptides and nucleic acids encoding
the same.
ACCESSION BD172760
VERSION BD172760.1 GI:28414064
KEYWORDS JP 2002238586-A/214.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 1378)
AUTHORS Wood,W.I., Gurney,A.L., Goddard,A., Pennica,D., Zheng,J. and
Yuan,J.
TITLE Secreted and transmembrane polypeptides and nucleic acids encoding
the same
JOURNAL Patent: JP 2002238586-A 214 27-AUG-2002;
GENENTECH INC
COMMENT OS Homo sapiens (human)
PN JP 2002238586-A/214
PD 27-AUG-2002
PF 18-DEC-2001 JP 2001385205
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07-NOV-1997 US 60/064809,12-NOV-1997 US 60/065186 PR
17-NOV-1997 US 60/065846,18-NOV-1997 US 60/065693 PR
21-NOV-1997 US 60/066120,21-NOV-1997 US 60/066364 PR
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24-NOV-1997 US 60/066770,24-NOV-1997 US 60/066511 PR
24-NOV-1997 US 60/066453,25-NOV-1997 US 60/066840 PI
WILLIAM I WOOD,AUSTIN L GURNEY,AUDREY GODDARD,DIANE PENNICA, PI
JIAN ZHENG,
PI JEAN YUAN
PC C12N15/09,C07K14/47,C07K16/18,C07K19/00,C12N1/19,C12N1/21, PC
C12N5/10,
PC C12P21/02//C12P21/08,(C12N1/19,C12R1:645),(C12N1/21,C12R1:19),
PC
(C12N5/10,C12R1:91),(C12P21/02,C12R1:91),(C12P21/02,C12R1:645), PC
(C12P21/02,C12R1:19),(C12P21/08,C12R1:91),C12N15/00,C12N5/00, PC
(C12N5/00,C12R1:91)
CC Secreted and transmembrane polypeptides and nucleic CC acids
encoding the same
FH Key Location/Qualifiers
FT source 1. .1378
FT /organism='Homo sapiens (human)'.

FEATURES Location/Qualifiers
source 1. .1378
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/mol_type="genomic DNA"
/db_xref="taxon:9606"

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 54;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

Qy 399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
Db 131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy 459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
Db 71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32

RESULT 79
BD173079/c
LOCUS BD173079 1378 bp DNA linear PAT 18-FEB-2003
DEFINITION Secreted and transmembrane polypeptides and nucleic acids encoding
the same.
ACCESSION BD173079
VERSION BD173079.1 GI:28414388
KEYWORDS JP 2002238587-A/214.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 1378)
AUTHORS Wood,W.I., Gurney,A.L., Goddard,A., Pennica,D., Zheng,J. and
Yuan,J.
TITLE Secreted and transmembrane polypeptides and nucleic acids encoding
the same
JOURNAL Patent: JP 2002238587-A 214 27-AUG-2002;
GENENTECH INC
COMMENT OS Homo sapiens (human)
PN JP 2002238587-A/214
PD 27-AUG-2002
PF 18-DEC-2001 JP 2001385248
PR 17-SEP-1997 US 60/059115,17-SEP-1997 US 60/059184 PR
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17-SEP-1997 US 60/059113,17-SEP-1997 US 60/059121 PR
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18-SEP-1997 US 60/059266,15-OCT-1997 US 60/062125 PR
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            WILLIAM I WOOD,AUSTIN L GURNEY,AUDREY GODDARD,DIANE PENNICA, PI
            JIAN ZHENG,
            PI   JEAN YUAN
            PC   C12N15/09,C07K14/47,C07K16/18,C12N1/19,C12N1/21,C12N5/10, PC
            C12N15/02,
            PC
            C12P21/02,C12P21/08//(C12P21/02,C12R1:91),(C12P21/02,C12R1:19), PC
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            and transmembrane polypeptides and nucleic CC   acids encoding the
            same
            FH   Key             Location/Qualifiers
            FT   source          1. .1378
            FT                   /organism='Homo sapiens (human)'.
FEATURES             Location/Qualifiers
     source          1. .1378
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  Query Match             0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 54;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   |  |  | | | |  | || |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32


RESULT 80
BD173398/c
LOCUS       BD173398               1378 bp    DNA     linear   PAT 18-FEB-2003
DEFINITION  Secreted and transmembrane polypeptides and nucleic acids encoding
            the same.
ACCESSION   BD173398
VERSION     BD173398.1  GI:28414709
KEYWORDS    JP 2002238588-A/214.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 1378)
  AUTHORS   Wood,W.I., Gurney,A.L., Goddard,A., Pennica,D., Zheng,J. and
            Yuan,J.
  TITLE     Secreted and transmembrane polypeptides and nucleic acids encoding
            the same
  JOURNAL   Patent: JP 2002238588-A 214 27-AUG-2002;
            GENENTECH INC
COMMENT     OS   Homo sapiens (human)
            PN   JP 2002238588-A/214
            PD   27-AUG-2002
            PF   18-DEC-2001 JP 2001385315
            PR   17-SEP-1997 US    60/059115,17-SEP-1997 US    60/059184 PR
            17-SEP-1997 US    60/059122,17-SEP-1997 US    60/059117 PR
            17-SEP-1997 US    60/059113,17-SEP-1997 US    60/059121 PR
            17-SEP-1997 US    60/059119,18-SEP-1997 US    60/059263 PR
            18-SEP-1997 US    60/059266,15-OCT-1997 US    60/062125 PR
            17-OCT-1997 US    60/062287,17-OCT-1997 US    60/062285 PR
            21-OCT-1997 US    60/063486,24-OCT-1997 US    60/062816 PR
            24-OCT-1997 US    60/062814,24-OCT-1997 US    60/063127 PR
            24-OCT-1997 US    60/063120,24-OCT-1997 US    60/063121 PR
            24-OCT-1997 US    60/063045,24-OCT-1997 US    60/063128 PR
            27-OCT-1997 US    60/063329,27-OCT-1997 US    60/063327 PR
            28-OCT-1997 US    60/063549,28-OCT-1997 US    60/063541 PR
            28-OCT-1997 US    60/063550,28-OCT-1997 US    60/063542 PR
            28-OCT-1997 US    60/063544,28-OCT-1997 US    60/063564 PR
            29-OCT-1997 US    60/063734,29-OCT-1997 US    60/063738 PR
            29-OCT-1997 US    60/063704,29-OCT-1997 US    60/063435 PR
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            29-OCT-1997 US    60/063732,31-OCT-1997 US    60/064103 PR
            31-OCT-1997 US    60/063870,03-NOV-1997 US    60/064248 PR
            07-NOV-1997 US    60/064809,12-NOV-1997 US    60/065186 PR
            17-NOV-1997 US    60/065846,18-NOV-1997 US    60/065693 PR
            21-NOV-1997 US    60/066120,21-NOV-1997 US    60/066364 PR
            24-NOV-1997 US    60/066772,24-NOV-1997 US    60/066466 PR
            24-NOV-1997 US    60/066770,24-NOV-1997 US    60/066511 PR
            24-NOV-1997 US    60/066453,25-NOV-1997 US    60/066840 PI
            WILLIAM I WOOD,AUSTIN L GURNEY,AUDREY GODDARD,DIANE PENNICA, PI
            JIAN ZHENG,
            PI   JEAN YUAN
            PC   C12N15/09,C07K14/435,C07K16/18,C07K19/00,C12N1/19,C12N1/21, PC
              C12N5/10,
            PC   C12P21/02//C12P21/08,(C12N1/19,C12R1:645),(C12N1/21,C12R1:19),
            PC   (C12N5/10,C12R1:91),C12N15/00,C12N5/00,(C12N5/00,C12R1:91) CC
             Secreted and transmembrane polypeptides and nucleic CC   acids
            encoding the same
            FH   Key             Location/Qualifiers
            FT   source          1. .1378
            FT                   /organism='Homo sapiens (human)'.
FEATURES             Location/Qualifiers
     source          1. .1378
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                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"

  Query Match             0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 54;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   |  |  | | | |  | || |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32


RESULT 81
BD175432/c
LOCUS       BD175432               1378 bp    DNA     linear   PAT 18-MAR-2003
DEFINITION  Secretory and transmembrane polypeptide and nucleic acid encoding
            the same.
ACCESSION   BD175432
VERSION     BD175432.1  GI:29121130
KEYWORDS    JP 2002253280-A/214.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 1378)
  AUTHORS   Wood,W.I., Gurney,A.L., Goddard,A., Pennica,D., Zheng,J. and
            Yuan,J.
  TITLE     Secretory and transmembrane polypeptide and nucleic acid encoding
            the same
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  JOURNAL   Patent: JP 2002253280-A 214 10-SEP-2002;
            GENENTECH INC
COMMENT     OS   Homo sapiens (human)
            PN   JP 2002253280-A/214
            PD   10-SEP-2002
            PF   18-DEC-2001 JP 2001385319
            PR   17-SEP-1997 US    60/059115,17-SEP-1997 US    60/059184 PR
            17-SEP-1997 US    60/059122,17-SEP-1997 US    60/059117 PR
            17-SEP-1997 US    60/059113,17-SEP-1997 US    60/059121 PR
            17-SEP-1997 US    60/059119,18-SEP-1997 US    60/059263 PR
            18-SEP-1997 US    60/059266,15-OCT-1997 US    60/062125 PR
            17-OCT-1997 US    60/062287,17-OCT-1997 US    60/062285 PR
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            24-OCT-1997 US    60/062814,24-OCT-1997 US    60/063127 PR
            24-OCT-1997 US    60/063120,24-OCT-1997 US    60/063121 PR
            24-OCT-1997 US    60/063045,24-OCT-1997 US    60/063128 PR
            27-OCT-1997 US    60/063329,27-OCT-1997 US    60/063327 PR
            28-OCT-1997 US    60/063549,28-OCT-1997 US    60/063541 PR
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            28-OCT-1997 US    60/063544,28-OCT-1997 US    60/063564 PR
            29-OCT-1997 US    60/063734,29-OCT-1997 US    60/063738 PR
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            29-OCT-1997 US    60/064215,29-OCT-1997 US    60/063735 PR
            29-OCT-1997 US    60/063732,31-OCT-1997 US    60/064103 PR
            31-OCT-1997 US    60/063870,03-NOV-1997 US    60/064248 PR
            07-NOV-1997 US    60/064809,12-NOV-1997 US    60/065186 PR
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            24-NOV-1997 US    60/066770,24-NOV-1997 US    60/066511 PR
            24-NOV-1997 US    60/066453,25-NOV-1997 US    60/066840 PI
            WILLIAM I WOOD,AUSTIN L GURNEY,AUDREY GODDARD,DIANE PENNICA, PI
            JIAN ZHENG,
            PI   JEAN YUAN
            PC   C12N15/09,A61K45/00,A61P1/00,A61P13/12,A61P17/00,A61P17/06, PC
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            PC   A61P25/16,A61P25/28,A61P31/12,A61P35/00,C07K14/47,C07K16/18,
            PC   C07K19/00,
            PC   C12N1/19,C12N1/21,C12N5/10//A61K38/00,A61K39/395,A61K39/395,
            PC   A61P43/00,
            PC   C12P21/08,(C12N1/19,C12R1:645),(C12N1/21,C12R1:19),(C12N5/10,
            PC   C12R1:91),
            PC   C12N15/00,C12N5/00,A61K37/02,(C12N5/00,C12R1:91) CC
            Secretory and transmembrane polypeptide and nucleic acid  CC
               encoding the same
            FH   Key             Location/Qualifiers
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            FT                   /organism='Homo sapiens (human)'.
FEATURES             Location/Qualifiers
     source          1. .1378
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  Query Match             0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 54;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||  | |   |  | | | | | | | || |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32


RESULT 82
AY358396/c
LOCUS       AY358396               1378 bp    mRNA    linear   PRI 03-OCT-2003
DEFINITION  Homo sapiens clone DNA43318 PRSS22 (UNQ302) mRNA, partial cds.
ACCESSION   AY358396
VERSION     AY358396.1  GI:37181916
KEYWORDS    FLI_CDNA.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 1378)
  AUTHORS   Clark,H.F., Gurney,A.L., Abaya,E., Baker,K., Baldwin,D., Brush,J.,
            Chen,J., Chow,B., Chui,C., Crowley,C., Currell,B., Deuel,B.,
            Dowd,P., Eaton,D., Foster,J., Grimaldi,C., Gu,Q., Hass,P.E.,
            Heldens,S., Huang,A., Kim,H.S., Klimowski,L., Jin,Y., Johnson,S.,
            Lee,J., Lewis,L., Liao,D., Mark,M., Robbie,E., Sanchez,C.,
            Schoenfeld,J., Seshagiri,S., Simmons,L., Singh,J., Smith,V.,
            Stinson,J., Vagts,A., Vandlen,R., Watanabe,C., Wieand,D., Woods,K.,
            Xie,M.H., Yansura,D., Yi,S., Yu,G., Yuan,J., Zhang,M., Zhang,Z.,
            Goddard,A., Wood,W.I. and Godowski,P.
  TITLE     The Secreted Protein Discovery Initiative (SPDI), a Large-Scale
            Effort to Identify Novel Human Secreted and Transmembrane Proteins:
            A Bioinformatics Assessment
  JOURNAL   Genome Res. 13 (10), 2265-2270 (2003)
  PUBMED    12975309
REFERENCE   2  (bases 1 to 1378)
  AUTHORS   Clark,H.F.
  TITLE     Direct Submission
  JOURNAL   Submitted (01-AUG-2003) Department of Bioinformatics, Genentech,
            Inc., 1 DNA Way, South San Francisco, CA 94080, USA
FEATURES             Location/Qualifiers
     source          1. .1378
                     /organism="Homo sapiens"
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                     /db_xref="taxon:9606"
                     /clone="DNA43318"
     gene            <1. .1378
                     /locus_tag="UNQ302"
     CDS             <1. .1006
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                     /note="PRO343"
                     /codon_start=2
                     /product="PRSS22"
                     /protein_id="AAQ88762.1"
                     /db_xref="GI:37181917"
                     /translation="HRPGSLEPAACSPAPPAMVVSGAPPALGGGCLGTFTSLLLLAST
                     AILNAARIPVPPACGKPQQLNRVVGGEDSTDSEWPWIVSIQKNGTHHCAGSLLTSRWV
                     ITAAHCFKDNLNKPYLFSVLLGAWQLGNPGSRSQKVGVAWVEPHPVYSWKEGACADIA
                     LVRLERSIQFSERVLPICLPDASIHLPPNTHCWISGWGSIQDGVPLPHPQTLQKLKVP
                     IIDSEVCSHLYWRGAGQGPITEDMLCAGYLEGERDACLGDSGGPLMCQVDGAWLLAGI
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                     "

  Query Match             0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 54;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||  | |   |  | | | | | | | || |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32


RESULT 83
AF003200/c
LOCUS       AF003200               1500 bp    mRNA    linear   MAM 06-JUL-1997
DEFINITION  Oryctolagus cuniculus blood coagulation factor X mRNA, complete
            cds.
ACCESSION   AF003200
VERSION     AF003200.1  GI:2245540
KEYWORDS    .
SOURCE      Oryctolagus cuniculus (rabbit)
  ORGANISM  Oryctolagus cuniculus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
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REFERENCE   1  (bases 1 to 1500)
  AUTHORS   Pendurthi,U.R., Anderson,K.D. and James,H.L.
  TITLE     Characterization of a full-length cDNA for rabbit factor X
  JOURNAL   Thromb. Res. 85 (6), 503-514 (1997)
  MEDLINE   97256311
   PUBMED   9101642
REFERENCE   2  (bases 1 to 1500)
  AUTHORS   Pendurthi,U.R., Anderson,K.D. and James,H.L.
  TITLE     Direct Submission
  JOURNAL   Submitted (08-MAY-1997) Medicine, University of Texas Health Center
            at Tyler, P.O. Box 2003, Tyler, TX 75710, USA
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                     DGLGMYTCSCVEGYEGQDCEPVTRKLCSLDNGGCDQFCKEEENSVLCSCASGYTLGDN
                     GKSCISTELFPCGKVTLGRWRRSPATNSSEGPPEAPGPEQQDDGNLTATENPFNLLDS
                     PEPPPEDDSSSLVRIVGGQDCRDGECPWQALLVNEENEGFCGGTILSEYHVLTAAHCL
                     HQAKRFKVRVGDRDTEHEEGNEETHEVEVVVKHNRFVKETYDFDIAVLRLKTPITFRR
                     NVAPACLPQKDWAESTLMAQKTGIVSGFGRTHEMGRLSTTLKMLEVPYVDRNSCKRSS
                     SFTITQNMFCAGYDARPEDACQGDSGGPHVTRFRDTYFVTGIVSWGEGCARKGKFGVY
                     TKVSNFLKWIEKSMRARAVPVAEAAGTPGPTQPTIKGSPS"

  Query Match             0.8%;  Score 21.6;  DB 1;  Length 1500;
  Best Local Similarity   52.2%;  Pred. No. 55;
  Matches   48;  Conservative    0;  Mismatches   44;  Indels    0;  Gaps    0;

Qy        270 TGGCTCCTTTGATCACTCCTCCAGGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTC 329
              ||||     |  ||   |||   |  | || ||| | ||| | |    ||  || |  |
Db       1263 TGGCAGGCGTCCTCGGGCCTGGCGTCGTAGCCAGCGCAGAACATGTTCTGGGTGATGGTG 1204

Qy        330 TAGATGCTGGCAGGCCCAATGATCATGTGGTC 361
               || |||||| | ||     | |  || ||||
Db       1203 AAGCTGCTGGAACGCTTGCAGCTGTTGCGGTC 1172


RESULT 84
BC061149/c
LOCUS       BC061149                1869 bp    mRNA    linear   ROD 25-NOV-2003
DEFINITION  Mus musculus coagulation factor VII, mRNA (cDNA clone MGC:74281
            IMAGE:30305571), complete cds.
ACCESSION   BC061149
VERSION     BC061149.1  GI:38511701
KEYWORDS    MGC.
SOURCE      Mus musculus (house mouse)
  ORGANISM  Mus musculus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE   1  (bases 1 to 1869)
  AUTHORS   Strausberg,R.L., Feingold,E.A., Grouse,L.H., Derge,J.G.,
            Klausner,R.D., Collins,F.S., Wagner,L., Shenmen,C.M., Schuler,G.D.,
            Altschul,S.F., Zeeberg,B., Buetow,K.H., Schaefer,C.F., Bhat,N.K.,
            Hopkins,R.F., Jordan,H., Moore,T., Max,S.I., Wang,J., Hsieh,F.,
            Diatchenko,L., Marusina,K., Farmer,A.A., Rubin,G.M., Hong,L.,
            Stapleton,M., Soares,M.B., Bonaldo,M.F., Casavant,T.L.,
            Scheetz,T.E., Brownstein,M.J., Usdin,T.B., Toshiyuki,S.,
            Carninci,P., Prange,C., Raha,S.S., Loquellano,N.A., Peters,G.J.,
            Abramson,R.D., Mullahy,S.J., Bosak,S.A., McEwan,P.J.,
            McKernan,K.J., Malek,J.A., Gunaratne,P.H., Richards,S.,
            Worley,K.C., Hale,S., Garcia,A.M., Gay,L.J., Hulyk,S.W.,
            Villalon,D.K., Muzny,D.M., Sodergren,E.J., Lu,X., Gibbs,R.A.,
            Fahey,J., Helton,E., Ketteman,M., Madan,A., Rodrigues,S.,
            Sanchez,A., Whiting,M., Madan,A., Young,A.C., Shevchenko,Y.,
            Bouffard,G.G., Blakesley,R.W., Touchman,J.W., Green,E.D.,
            Dickson,M.C., Rodriguez,A.C., Grimwood,J., Schmutz,J., Myers,R.M.,
            Butterfield,Y.S., Krzywinski,M.I., Skalska,U., Smailus,D.E.,
            Schnerch,A., Schein,J.E., Jones,S.J. and Marra,M.A.
  TITLE     Generation and initial analysis of more than 15,000 full-length
            human and mouse cDNA sequences
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
  MEDLINE   22388257
   PUBMED   12477932
REFERENCE   2  (bases 1 to 1869)
  AUTHORS   Strausberg,R.
  TITLE     Direct Submission
  JOURNAL   Submitted (03-NOV-2003) National Institutes of Health, Mammalian
            Gene Collection (MGC), Cancer Genomics Office, National Cancer
            Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
            USA
  REMARK    NIH-MGC Project URL: http://mgc.nci.nih.gov
COMMENT     Contact: MGC help desk
            Email: cgapbs-r@mail.nih.gov
            Tissue Procurement: Dr. Michael Brownstein
            cDNA Library Preparation: Michael Brownstein /  Ted Usdin
            Laboratory
            cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
            DNA Sequencing by: Sequencing Group at the Stanford Human Genome
            Center, Stanford University School of Medicine, Stanford, CA  94305
            Web site:       http://www-shgc.stanford.edu
            Contact:  (Dickson, Mark) mcd@paxil.stanford.edu
            Dickson, M., Schmutz, J., Grimwood, J., Rodriquez, A., and Myers,
            R. M.

            Clone distribution: MGC clone distribution information can be found
            through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
            Series: IRAL Plate: 53 Row: n Column: 1
            This clone was selected for full length sequencing because it
            passed the following selection criteria: matched mRNA gi: 6753805.
FEATURES             Location/Qualifiers
     source          1. .1869
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                     /mol_type="mRNA"
                     /db_xref="taxon:10090"
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                     /note="Vector: pDNR-LIB"
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     CDS             10. .1350
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                     RGKINHDIALLRLHRPVTFTDYVVPLCLPEKSFSENTLARIRFSRVSGWGQLLDRGAT
                     ALELMSIEVPRLMTQDCLEHAKHSSNTPKITENMFCAGYMDGTKDACKGDSGGPHATH
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                     /db_xref="CDD:smart00069"
     misc_feature    268. .378
                     /note="EGF_CA; Region: Calcium-binding EGF-like domain,
                     present in a large number of membrane-bound and
                     extracellular (mostly animal) proteins. Many of these
                     proteins require calcium for their biological function and
                     calcium-binding sites have been found to be located at the
                     N-terminus of particular EGF-like domains"
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                  /db_xref="CDD:cd00054"
     misc_feature 589. .1302
                  /note="Tryp_SPc; Region: Trypsin-like serine protease"
                  /db_xref="CDD:cd00190"

  Query Match             0.8%;  Score 21.6;  DB 1;  Length 1869;
  Best Local Similarity   68.2%;  Pred. No. 56;
  Matches   30;  Conservative    0;  Mismatches   14;  Indels    0;  Gaps    0;

Qy       2129 TTTTTCTTTTTTGGTTTTCTTGAAAATATTTTCCCTGCTTTTGA 2172
              ||||| ||||||  |||| ||||  || |||  | |    ||||
Db       1860 TTTTTTTTTTTTTTTTTTTTGACCATGTTTCTCATTTAATTGA 1817


RESULT 85
AX565990/c
LOCUS       AX565990               6098 bp    DNA     linear   PAT 29-NOV-2002
DEFINITION  Sequence 2 from Patent WO02077218.
ACCESSION   AX565990
VERSION     AX565990.1  GI:26001242
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Persson,E.
  TITLE     Coagulation factor vii derivatives
  JOURNAL   Patent: WO 02077218-A 2 03-OCT-2002;
            NOVO NORDISK A/S (DK)
FEATURES             Location/Qualifiers
     source          1. .6098
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Plasmid DNA pLN174"

  Query Match             0.8%;  Score 21.6;  DB 1;  Length 6098;
  Best Local Similarity   52.2%;  Pred. No. 57;
  Matches   48;  Conservative    0;  Mismatches   44;  Indels    0;  Gaps    0;

Qy        144 ATAATGCTCTTTATGTTGTCCAGTGTATTTTTACACTGTTGTTTACCCATCTCTTCCTCC 203
              ||  | |   |  ||   ||||||    | | || |  | ||  |||||  ||  || ||
Db       2951 ATCTTACCGCTGTTGAGATCCAGTTCGATGTAACCCACTCGTGCACCCAACTGATCTTCA 2892

Qy        204 AATTGTACAGATGAATCCAGTGTTTCAGGGGG 235
                | |     |    |||| |||||  ||| |
Db       2891 GCATCTTTTACTTTCACCAGCGTTTCTGGGTG 2860


RESULT 86
AY226143/c
LOCUS       AY226143                244 bp    DNA     linear   PRI 02-APR-2003
DEFINITION  Homo sapiens coagulant factor IX gene, exon 2 and partial cds.
ACCESSION   AY226143
VERSION     AY226143.1  GI:29469529
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 244)
  AUTHORS   Karimipoor,M., Nafissi,N., Safaee,R., Lak,M., Lotfi,V. and
            Zeinali,S.
  TITLE     Novel mutation in donor splice site of intron 2 of factor IX gene
            in an Iranian hemophilia B patient
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 244)
  AUTHORS   Karimipoor,M., Nafissi,N., Safaee,R., Lak,M., Lotfi,V. and
            Zeinali,S.
  TITLE     Direct Submission
  JOURNAL   Submitted (28-JAN-2003) Biotechnology Research Center, Pasteur
            Institute of Iran, Pasteur Street, Tehran 13164, Iran
FEATURES             Location/Qualifiers
     source          1. .244
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /isolation_source="Iranian hemophilia B patient"
                     /db_xref="taxon:9606"
                     /chromosome="X"
                     /map="Xq27.1"
     mRNA            <41. .>204
                     /product="coagulant factor IX"
     CDS             <41. .>204
                     /note="GLA domain"
                     /codon_start=3
                     /product="coagulant factor IX"
                     /protein_id="AAO73937.1"
                     /db_xref="GI:29469530"
                     /translation="FLDHENANKILNRPKRYNSGKLEEFVQGNLERECMEEKCSFEEA
                     REVFENTERT"
     exon            41. .204
                     /number=2

  Query Match             0.8%;  Score 21.4;  DB 1;  Length 244;
  Best Local Similarity   48.0%;  Pred. No. 51;
  Matches   61;  Conservative    0;  Mismatches   66;  Indels    0;  Gaps    0;

Qy         74 CTTCATCTGCACTGGGATGTTCAGATGTTCAGGTCTTGCTGTTGTAGAACCACCAGTTTC 133
              || ||||| |  |   | |   ||  | | | |||| | ||  |   |  | |  |
Db        234 CTGCATCTGAAGGGTATTATGTGGAAATACTGTTCTTTCAGTGTTTTCAAAAACTTCTCG 175

Qy        134 TGGTTGTGCCATAATGCTCTTTATGTTGTCCAGTGTATTTTTACACTGTTGTTTACCCAT 193
              || || | | | | | | ||||  |       |   | | |   |    || | | |
Db        174 TGCTTCTTCAAAACTACACTTTTCTTCCATACATTCTCTCTCAAGGTTCCCTTGAACAAA 115

Qy        194 CTCTTCC 200
              |||||||
Db        114 CTCTTCC 108


RESULT 87
AX839181
LOCUS       AX839181               328 bp    DNA     linear   PAT 15-DEC-2003
DEFINITION  Sequence 24 from Patent WO03076610.
ACCESSION   AX839181
VERSION     AX839181.1  GI:39922630
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Bracco,L., Brinkman,B. and Coignard,F.
  TITLE     Variants of human kallikrein-2 and kallikrein-3 and uses thereof
  JOURNAL   Patent: WO 03076610-A 24 18-SEP-2003;
            Exonhit Therapeutics S.A. (FR)
FEATURES             Location/Qualifiers
     source          1. .328
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.8%;  Score 21.4;  DB 1;  Length 328;
  Best Local Similarity   52.9%;  Pred. No. 53;
  Matches   46;  Conservative    0;  Mismatches   41;  Indels    0;  Gaps    0;

Qy       2572 CTTGTGCTTCAGCTATGTTGCATTCTCAGGGCCTATTGTAATAGGGTTTTAGCAGGGACA 2631
              || |||| |  |  ||   | |         ||| | || |  |||   | || |||| |
Db        190 CTGGTGCACCCCCAGTGGGTCCTCACAGCTGCCCACTGCATCAGGAAGTGAGTAGGGGCC 249

Qy       2632 TATTGTCCTGGTTGTTATTGTCTGTGT 2658
              |   |||  ||  |    |||||||||
Db        250 TGGGGTCTGGGGAGCAGGTGTCTGTGT 276


RESULT 88
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AX464088/c
LOCUS       AX464088               1129 bp    DNA     linear   PAT 16-JUL-2002
DEFINITION  Sequence 221 from Patent WO0140466.
ACCESSION   AX464088
VERSION     AX464088.1  GI:21899060
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Baker,K.P., Beresini,M., Deforge,L., Desnoyers,L., Filvaroff,E.,
            Gao,W.Q., Gerritsen,M.E., Goddard,A., Godowski,P.J., Gurney,A.L.,
            Sherwood,S., Smith,V., Stewart,T.A., Tumas,D., Watanabe,C.K.,
            Wood,W.L. and Zhang,Z.
  TITLE     Secreted and transmembrane polypeptides and nucleic acids encoding
            same
  JOURNAL   Patent: WO 0140466-A 221 07-JUN-2001;
            Genentech Inc. (US)
FEATURES             Location/Qualifiers
     source          1. .1129
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.8%;  Score 21.4;  DB 1;  Length 1129;
  Best Local Similarity   66.0%;  Pred. No. 60;
  Matches   31;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy       2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
             || ||  ||||||  ||| ||| |  |   |||  |||||||  ||
Db       1129 TTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083


RESULT 89
AY359106/c
LOCUS       AY359106               1129 bp    mRNA    linear   PRI 03-OCT-2003
DEFINITION  Homo sapiens clone DNA99391 MPN (UNQ1884) mRNA, complete cds.
ACCESSION   AY359106
VERSION     AY359106.1  GI:37183328
KEYWORDS    FLI_CDNA.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 1129)
  AUTHORS   Clark,H.F., Gurney,A.L., Abaya,E., Baker,K., Baldwin,D., Brush,J.,
            Chen,J., Chow,B., Chui,C., Crowley,C., Currell,B., Deuel,B.,
            Dowd,P., Eaton,D., Foster,J., Grimaldi,C., Gu,Q., Hass,P.E.,
            Heldens,S., Huang,A., Kim,H.S., Klimowski,L., Jin,Y., Johnson,S.,
            Lee,J., Lewis,L., Liao,D., Mark,M., Robbie,E., Sanchez,C.,
            Schoenfeld,J., Seshagiri,S., Simmons,L., Singh,J., Smith,V.,
            Stinson,J., Vagts,A., Vandlen,R., Watanabe,C., Wieand,D., Woods,K.,
            Xie,M.H., Yansura,D., Yi,S., Yu,G., Yuan,J., Zhang,M., Zhang,Z.,
            Goddard,A., Wood,W.I. and Godowski,P.
  TITLE     The Secreted Protein Discovery Initiative (SPDI), a Large-Scale
            Effort to Identify Novel Human Secreted and Transmembrane Proteins:
            A Bioinformatics Assessment
  JOURNAL   Genome Res. 13 (10), 2265-2270 (2003)
   PUBMED   12975309
REFERENCE   2  (bases 1 to 1129)
  AUTHORS   Clark,H.F.
  TITLE     Direct Submission
  JOURNAL   Submitted (01-AUG-2003) Department of Bioinformatics, Genentech,
            Inc., 1 DNA Way, South San Francisco, CA 94080, USA
FEATURES             Location/Qualifiers
     source          1. .1129
                     /organism="Homo sapiens"
                     /mol_type="mRNA"
                     /db_xref="taxon:9606"
                     /clone="DNA99391"
     gene            1. .1129
                     /locus_tag="UNQ1884"
     CDS             36. .908
                     /locus_tag="UNQ1884"
                     /note="PRO4327"
                     /codon_start=1
                     /product="MPN"
                     /protein_id="AAQ89464.1"
                     /db_xref="GI:37183329"
                     /translation="MRRPAAVPLLLLLCFGSQRAKAATACGRPRMLNRMVGGQDTQEG
                     EWPWQVSIQRNGSHFCGGSLIAEQWVLTAAHCFRNTSETSLYQVLLGARQLVQPGPHA
                     MYARVRQVESNPLYQGTASSADVALVELEAPVPFTNYILPVCLPDPSVIFETGMNCWV
                     TGWGSPSEEDLLPEPRILQKLAVPIIDTPKCNLLYSKDTEFGYQPKTIKNDMLCAGFE
                     EGKKDACKGDSGGPLVCLVGQSWLQAGVISWGEGCARQNRPGVYIRVTAHHNWIHRII
                     PKLQFQPARLGGQK"

  Query Match             0.8%;  Score 21.4;  DB 1;  Length 1129;
  Best Local Similarity   66.0%;  Pred. No. 60;
  Matches   31;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy       2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
             || ||  ||||||  ||| ||| |  |   |||  |||||||  ||
Db       1129 TTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083


RESULT 90
AX565990
LOCUS       AX565990               6098 bp    DNA     linear   PAT 29-NOV-2002
DEFINITION  Sequence 2 from Patent WO02077218.
ACCESSION   AX565990
VERSION     AX565990.1  GI:26001242
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Persson,E.
  TITLE     Coagulation factor vii derivatives
  JOURNAL   Patent: WO 02077218-A 2 03-OCT-2002;
            NOVO NORDISK A/S (DK)
FEATURES             Location/Qualifiers
     source          1. .6098
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Plasmid DNA pLN174"

  Query Match             0.8%;  Score 21.4;  DB 1;  Length 6098;
  Best Local Similarity   49.5%;  Pred. No. 64;
  Matches   55;  Conservative    0;  Mismatches   56;  Indels    0;  Gaps    0;

Qy       2078 TTTGTATGCTTCTTGTACCTTGATAGGCATCTCTTTCTCAAGGTTAGGAAATTTTTCTTT 2137
             ||| || | ||| ||  | ||     ||| | |   || || | |           || |
Db       4429 TTTTTACGGTTCCTGGCCTTTTGCTGGCCTTTTGCTCACATGTTCTTTCCTGCGTTATCC 4488

Qy       2138 TTTGGTTTTCTTGAAAATATTTTCCCTGCTTTTGACCTGCCTTCTTCCCCT 2188
               || || | | || ||   | |  | || |||||     ||  | || ||
Db       4489 CCTGATTCTGTGGATAACCGTATTACCGCCTTTGAGTGAGCTGATACCGCT 4539


RESULT 91
AX265101/c
LOCUS       AX265101                121 bp    DNA     linear   PAT 26-OCT-2001
DEFINITION  Sequence 2492 from Patent WO0173002.
ACCESSION   AX265101
VERSION     AX265101.1  GI:16513900
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Kmiec,E.B., Gamper,H.B. and Rice,M.C.
  TITLE     Targeted chromosomal genomic alterations with modified single
            stranded oligonucleotides
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  JOURNAL   Patent: WO 0173002-A 2492 04-OCT-2001;
            UNIVERSITY OF DELAWARE (US)
FEATURES             Location/Qualifiers
     source          1. .121
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.8%;  Score 21.2;  DB 1;  Length 121;
  Best Local Similarity   53.7%;  Pred. No. 53;
  Matches   44;  Conservative    0;  Mismatches   38;  Indels    0;  Gaps    0;

Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
             | |||  || | || ||   |    ||  ||   | |  |||  || |  |  |   |||
Db         83 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 24

Qy       2664 CTTTGGCATATAGACGGCTGAG 2685
                |||||   || || ||| ||
Db         23 AATTGGCACGTAAACTGCTTAG 2

RESULT 92
AX265102
LOCUS       AX265102                 121 bp    DNA     linear   PAT 26-OCT-2001
DEFINITION  Sequence 2493 from Patent WO0173002.
ACCESSION   AX265102
VERSION     AX265102.1  GI:16513901
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Kmiec,E.B., Gamper,H.B. and Rice,M.C.
  TITLE     Targeted chromosomal genomic alterations with modified single
            stranded oligonucleotides
  JOURNAL   Patent: WO 0173002-A 2493 04-OCT-2001;
            UNIVERSITY OF DELAWARE (US)
FEATURES             Location/Qualifiers
     source          1. .121
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.8%;  Score 21.2;  DB 1;  Length 121;
  Best Local Similarity   53.7%;  Pred. No. 53;
  Matches   44;  Conservative    0;  Mismatches   38;  Indels    0;  Gaps    0;

Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
             | |||  || | || ||   |    ||  ||   | |  |||  || |  |  |   |||
Db         39 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 98

Qy       2664 CTTTGGCATATAGACGGCTGAG 2685
                |||||   || || ||| ||
Db         99 AATTGGCACGTAAACTGCTTAG 120

RESULT 93
AX265097/c
LOCUS       AX265097                 121 bp    DNA     linear   PAT 26-OCT-2001
DEFINITION  Sequence 2488 from Patent WO0173002.
ACCESSION   AX265097
VERSION     AX265097.1  GI:16513896
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Kmiec,E.B., Gamper,H.B. and Rice,M.C.
  TITLE     Targeted chromosomal genomic alterations with modified single
            stranded oligonucleotides
  JOURNAL   Patent: WO 0173002-A 2488 04-OCT-2001;
            UNIVERSITY OF DELAWARE (US)
FEATURES             Location/Qualifiers
     source          1. .121
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.8%;  Score 21.2;  DB 1;  Length 121;
  Best Local Similarity   53.7%;  Pred. No. 53;
  Matches   44;  Conservative    0;  Mismatches   38;  Indels    0;  Gaps    0;

Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
             | |||  || | || ||   |    ||  ||   | |  |||  || |  |  |   |||
Db         84 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 25

Qy       2664 CTTTGGCATATAGACGGCTGAG 2685
                |||||   || || ||| ||
Db         24 AATTGGCACGTAAACTGCTTAG 3

RESULT 94
AX265098
LOCUS       AX265098                 121 bp    DNA     linear   PAT 26-OCT-2001
DEFINITION  Sequence 2489 from Patent WO0173002.
ACCESSION   AX265098
VERSION     AX265098.1  GI:16513897
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Kmiec,E.B., Gamper,H.B. and Rice,M.C.
  TITLE     Targeted chromosomal genomic alterations with modified single
            stranded oligonucleotides
  JOURNAL   Patent: WO 0173002-A 2489 04-OCT-2001;
            UNIVERSITY OF DELAWARE (US)
FEATURES             Location/Qualifiers
     source          1. .121
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.8%;  Score 21.2;  DB 1;  Length 121;
  Best Local Similarity   53.7%;  Pred. No. 53;
  Matches   44;  Conservative    0;  Mismatches   38;  Indels    0;  Gaps    0;

Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
             | |||  || | || ||   |    ||  ||   | |  |||  || |  |  |   |||
Db         38 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 97

Qy       2664 CTTTGGCATATAGACGGCTGAG 2685
                |||||   || || ||| ||
Db         98 AATTGGCACGTAAACTGCTTAG 119

RESULT 95
AR306919/c
LOCUS       AR306919                 229 bp    DNA     linear   PAT 12-JUN-2003
DEFINITION  Sequence 18 from patent US 6551575.
ACCESSION   AR306919
VERSION     AR306919.1  GI:31697382
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 229)
  AUTHORS   Greenspan,R.J.
  TITLE     Methods for identifying compounds for motion sickness, vertigo and
            other disorders related to balance and the perception of gravity
  JOURNAL   Patent: US 6551575-A 18 22-APR-2003;
FEATURES             Location/Qualifiers
     source          1. .229
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                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.8%;  Score 21.2;  DB 1;  Length 229;
  Best Local Similarity   64.0%;  Pred. No. 57;
  Matches   32;  Conservative    0;  Mismatches   18;  Indels    0;  Gaps    0;

Qy        292 AGGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCA 341
              || ||   || |    ||||  |||| |||||||  || || ||| | ||
Db        187 AGCAGTGAGCCGCTGTGAGCACCAGGCGATTGCTTATCAAGGTGCCGCCA 138


RESULT 96
AX154669/c
LOCUS       AX154669                229 bp    DNA     linear   PAT 22-JUN-2001
DEFINITION  Sequence 18 from Patent WO0140519.
ACCESSION   AX154669
VERSION     AX154669.1  GI:14536226
KEYWORDS    .
SOURCE      Drosophila sp.
  ORGANISM  Drosophila sp.
            Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
            Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
            Ephydroidea; Drosophilidae; Drosophila.
REFERENCE   1
  AUTHORS   Greenspan,R.J.
  TITLE     Methods for identifying modulators for balance related disorders
  JOURNAL   Patent: WO 0140519-A 18 07-JUN-2001;
            Neurosciences Research Foundation Inc. (US)
FEATURES             Location/Qualifiers
     source          1. .229
                     /organism="Drosophila sp."
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:7242"

  Query Match             0.8%;  Score 21.2;  DB 1;  Length 229;
  Best Local Similarity   64.0%;  Pred. No. 57;
  Matches   32;  Conservative    0;  Mismatches   18;  Indels    0;  Gaps    0;

Qy        292 AGGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCA 341
              || ||   || |    ||||  |||| |||||||  || || ||| | ||
Db        187 AGCAGTGAGCCGCTGTGAGCACCAGGCGATTGCTTATCAAGGTGCCGCCA 138


RESULT 97
HSNTCH09
LOCUS       HSNTCH09                302 bp    DNA     linear   PRI 21-APR-1998
DEFINITION  Homo sapiens Notch3 (NOTCH3) gene, exon 18.
ACCESSION   AF058889
VERSION     AF058889.1  GI:3065938
KEYWORDS    .
SEGMENT     9 of 20
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 302)
  AUTHORS   Gunel,M. and Artavanis-Tsakonas,S.
  TITLE     Direct Submission
  JOURNAL   Submitted (10-APR-1998) Neurosurgery & Cell Biology, Yale
            University, 333 Cedar St., New Haven, CT 06510, USA
FEATURES             Location/Qualifiers
     source          1. .302
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"
                     /chromosome="19"
                     /map="19p13"
     exon            51. .252
                     /gene="NOTCH3"
                     /number=18

  Query Match             0.8%;  Score 21.2;  DB 1;  Length 302;
  Best Local Similarity   50.0%;  Pred. No. 59;
  Matches   53;  Conservative    0;  Mismatches   53;  Indels    0;  Gaps    0;

Qy        383 GCCATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCAC 442
              | | |||| || ||    || || |||     ||||||  || || |||| | |  |
Db        110 GTCCCGGCTACACAGGAGCCCACTGCCAACATGAGGCAGACCCCTGCCTCTCGCGGCCCT 169

Qy        443 TCCTCTAGTGAAAGGTGGGGGTCTGAGGCTCCAATGGTTGTTGATG 488
               |||  |  |    ||  |   |   | |  |  |||  |   | ||
Db        170 GCCTACACGGGGGCGTCTGCAGCGCCGCCCACCCTGGCTTCCGCTG 215


RESULT 98
ALRSAA
LOCUS       ALRSAA                  302 bp    DNA     linear   BCT 05-DEC-1994
DEFINITION  A.lipoferum DNA sequence.
ACCESSION   X73827
VERSION     X73827.1  GI:313359
KEYWORDS    .
SOURCE      Azospirillum lipoferum
  ORGANISM  Azospirillum lipoferum
            Bacteria; Proteobacteria; Alphaproteobacteria; Rhodospirillales;
            Rhodospirillaceae; Azospirillum.
REFERENCE   1
  AUTHORS   Fani,R., Damiani,G., Di Serio,C., Gallori,E., Grifoni,A. and
            Bazzicalupo,M.
  TITLE     Use of random amplified polymorphic DNA (RAPD) for generating
            specific DNA probes for microorganisms
  JOURNAL   Mol. Ecol. 2 (4), 243-250 (1993)
  MEDLINE   94221304
   PUBMED   8167854
REFERENCE   2  (bases 1 to 302)
  AUTHORS   Bazzicalupo,M.
  TITLE     Direct Submission
  JOURNAL   Submitted (30-JUN-1993) M. Bazzicalupo, Dipt di Biologia Animale e
            Genetica, Via Romana 17, 50125 Firenze, ITALY
FEATURES             Location/Qualifiers
     source          1. .302
                     /organism="Azospirillum lipoferum"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:193"
                     /tissue_lib="ATCC 29708"

  Query Match             0.8%;  Score 21.2;  DB 1;  Length 302;
  Best Local Similarity   76.5%;  Pred. No. 59;
  Matches   26;  Conservative    0;  Mismatches    8;  Indels    0;  Gaps    0;

Qy          3 GCAGGAAGAGGCGACAGGGGACAGCGGCATCTGC 36
              |||||  ||||||  |  ||| | |||||||  |||
Db         16 GCAGGTGGAGGCGGCGCGGGCCTGCGGCATGTGC 49


RESULT 99
BTA271156/c
LOCUS       BTA271156               302 bp    mRNA    linear   MAM 27-JUL-2000
DEFINITION  Bos taurus partial mRNA for haptoglobin (hp gene).
ACCESSION   AJ271156
VERSION     AJ271156.1  GI:9581738
KEYWORDS    haptoglobin; hp gene.
SOURCE      Bos taurus (cow)
  ORGANISM  Bos taurus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
            Bovidae; Bovinae; Bos.
REFERENCE   1
  AUTHORS   Lavery,K.S., Gabler,C. and Killian,G.J.
  TITLE     Expression and localization of haptoglobin in the bovine female
            reproductive tract
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 302)
  AUTHORS   Lavery,K.S.
  TITLE     Direct Submission
  JOURNAL   Submitted (28-JAN-2000) Lavery K.S., Dairy & Animal Science,
```

```
            Pennsylvania State University, The John O. Almquist Research
            Center, Fox Hollow Road, University Park, USA
FEATURES             Location/Qualifiers
     source          1. .302
                     /organism="Bos taurus"
                     /mol_type="mRNA"
                     /db_xref="taxon:9913"
                     /sex="female"
                     /cell_type="epithelial cell"
                     /tissue_type="oviduct"
                     /dev_stage="adult"
     gene            1. .302
                     /gene="hp"
     CDS             <1. .>302
                     /gene="hp"
                     /function="acute phase protein"
                     /codon_start=3
                     /product="haptoglobin"
                     /protein_id="CAC00531.1"
                     /db_xref="GI:9581739"
                     /db_xref="GOA:Q9MYV8"
                     /db_xref="SPTREMBL:Q9MYV8"
                     /translation="KGSPPWQAKMVSQHNLISGATLINERWLLTTAKNLYLGHSSDKK
                     AKDITPTLRLYVGKNQLVEVEKVVLHPDHSKVDIGLIKLRQKVPVNDKVMPICLPS"

  Query Match              0.8%;  Score 21.2;  DB 1;  Length 302;
  Best Local Similarity   60.3%;  Pred. No. 59;
  Matches   35;  Conservative    0;  Mismatches   23;  Indels    0;  Gaps    0;

Qy        355 TGTGGTCAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGG 412
              |||||| ||   ||   || ||   |||  | ||||||| |||||    |  | | ||
Db         95 TGTGGTGAGGAGCCATCGTTCATTGATGAGCGTGGCTCCCGAGATGAGGTTATGCTGG 38


RESULT 100
BC046125/c
LOCUS       BC046125               1541 bp    mRNA    linear   PRI 07-OCT-2003
DEFINITION  Homo sapiens coagulation factor X, mRNA (cDNA clone MGC:57588
            IMAGE:5723510), complete cds.
ACCESSION   BC046125
VERSION     BC046125.1  GI:28374355
KEYWORDS    MGC.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 1541)
  AUTHORS   Strausberg,R.L., Feingold,E.A., Grouse,L.H., Derge,J.G.,
            Klausner,R.D., Collins,F.S., Wagner,L., Shenmen,C.M., Schuler,G.D.,
            Altschul,S.F., Zeeberg,B., Buetow,K.H., Schaefer,C.F., Bhat,N.K.,
            Hopkins,R.F., Jordan,H., Moore,T., Max,S.I., Wang,J., Hsieh,F.,
            Diatchenko,L., Marusina,K., Farmer,A.A., Rubin,G.M., Hong,L.,
            Stapleton,M., Soares,M.B., Bonaldo,M.F., Casavant,T.L.,
            Scheetz,T.E., Brownstein,M.J., Usdin,T.B., Toshiyuki,S.,
            Carninci,P., Prange,C., Raha,S.S., Loquellano,N.A., Peters,G.J.,
            Abramson,R.D., Mullahy,S.J., Bosak,S.A., McEwan,P.J.,
            McKernan,K.J., Malek,J.A., Gunaratne,P.H., Richards,S.,
            Worley,K.C., Hale,S., Garcia,A.M., Gay,L.J., Hulyk,S.W.,
            Villalon,D.K., Muzny,D.M., Sodergren,E.J., Lu,X., Gibbs,R.A.,
            Fahey,J., Helton,E., Ketteman,M., Madan,A., Rodrigues,S.,
            Sanchez,A., Whiting,M., Madan,A., Young,A.C., Shevchenko,Y.,
            Bouffard,G.G., Blakesley,R.W., Touchman,J.W., Green,E.D.,
            Dickson,M.C., Rodriguez,A.C., Grimwood,J., Schmutz,J., Myers,R.M.,
            Butterfield,Y.S., Krzywinski,M.I., Skalska,U., Smailus,D.E.,
            Schnerch,A., Schein,J.E., Jones,S.J. and Marra,M.A.
  TITLE     Generation and initial analysis of more than 15,000 full-length
            human and mouse cDNA sequences
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
  MEDLINE   22388257
   PUBMED   12477932
REFERENCE   2  (bases 1 to 1541)
  AUTHORS   Strausberg,R.
  TITLE     Direct Submission
  JOURNAL   Submitted (31-JAN-2003) National Institutes of Health, Mammalian
            Gene Collection (MGC), Cancer Genomics Office, National Cancer
            Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
            USA
  REMARK    NIH-MGC Project URL: http://mgc.nci.nih.gov
COMMENT     Contact: MGC help desk
            Email: cgapbs-r@mail.nih.gov
            Tissue Procurement: Invitrogen
            cDNA Library Preparation: Life Technologies, Inc.
            cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
            DNA Sequencing by: Sequencing Group at the Stanford Human Genome
            Center, Stanford University School of Medicine, Stanford, CA  94305
            Web site:       http://www-shgc.stanford.edu
            Contact:  (Dickson, Mark) mcd@paxil.stanford.edu
            Dickson, M., Schmutz, J., Grimwood, J., Rodriquez, A., and Myers,
            R. M.

            Clone distribution: MGC clone distribution information can be found
            through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
            Series: IRAK Plate: 107 Row: h Column: 24
            This clone was selected for full length sequencing because it
            passed the following selection criteria: matched mRNA gi: 9961350.
FEATURES             Location/Qualifiers
     source          1. .1541
                     /organism="Homo sapiens"
                     /mol_type="mRNA"
                     /db_xref="taxon:9606"
                     /clone="MGC:57588 IMAGE:5723510"
                     /tissue_type="Ovary, pooled from 3 adults"
                     /clone_lib="NIH_MGC_125"
                     /lab_host="DH10B"
                     /note="Vector: pCMV-SPORT6"
     gene            1. .1541
                     /gene="F10"
                     /note="synonyms: FX, FXA"
                     /db_xref="LocusID:2159"
                     /db_xref="MIM:227600"
     CDS             39. .1505
                     /codon_start=1
                     /product="coagulation factor X precursor"
                     /protein_id="AAH46125.1"
                     /db_xref="GI:28374356"
                     /db_xref="LocusID:2159"
                     /translation="MGRPLHLVLLSASLAGLLLLGESLFIRREQANNILARVTRANSF
                     LEEMKKGHLERECMEETCSYEEAREVFEDSDKTNEFWNKYKDGDQCETSPCQNQGKCK
                     DGLGEYTCTCLEGFEGKNCELFTRKLCSLDNGDCDQFCHEEQNSVVCSCARGYTLADN
                     GKACIPTGPYPCGKQTLERRKRSVAQATSSSGEAPDSITWKPYDAADLDPTENPFDLL
                     DFNQTQPERGDNNLTRIVGGQECKDGECPWQALLINEENEGFCGGTILSEFYILTAAH
                     CLYQAKRFKVRVGDRNTEQEEGGEAVHEVEVVIKHNRFTKETYDFDIAVLRLKTPITF
                     RMNVAPACLPERDWAESTLMTQKTGIVSGFGRTHEKGRQSTRLKMLEVPYVDRNSCKL
                     SSSFIITQNMFCAGYDTKQEDACQGDSGGPHVTRFKDTYFVTGIVSWGEGCARKGKYG
                     IYTKVTAFLKWIDRSMKTRGLPKAKSHAPEVITSSPLK"
     misc_feature    111. .293
                     /note="GLA; Region: Domain containing Gla
                     (gamma-carboxyglutamate) residues. A hyaluronan-binding
                     domain found in proteins associated with the extracellular
                     matrix, cell adhesion and cell migration"
                     /db_xref="CDD:smart00069"
     misc_feature    318. .401
                     /note="EGF; Region: EGF-like domain. There is no clear
                     separation between noise and signal. pfam00053 is very
                     similar, but has 8 instead of 6 conserved cysteines.
                     Includes some cytokine receptors. The EGF domain misses
                     the N-terminus regions of the Ca2+ binding EGF domains.
                     The family is hard to model due to many similar but
                     different sub-types of EGF domains. Pfam certainly misses
                     a number of EGF domains"
                     /db_xref="CDD:pfam00008"
     misc_feature    738. .1424
                     /note="Tryp_SPc; Region: Trypsin-like serine protease"
                     /db_xref="CDD:smart00020"

  Query Match              0.8%;  Score 21.2;  DB 1;  Length 1541;
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Best Local Similarity 60.3%; Pred. No. 70;
Matches 35; Conservative 0; Mismatches 23; Indels 0; Gaps 0;

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Qy       2075 TGTTTTGTATGCTTCTTGTACCTTGATAGGCATCTCTTTCTCAAGGTTAGGAAATTTT 2132
              | |||| | |  || || |   ||||  || |||||  | | | ||  ||||  || |
Db       1539 TTTTTTTTTTTTTTTTTTTTTTTGAGTGGGATCTCACTTTAATGGAGAGGACGTTAT 1482
```

RESULT 101
BD060364/c
LOCUS BD060364 267 bp DNA linear PAT 27-AUG-2002
DEFINITION Secreted expressed sequence tags (sESTs).
ACCESSION BD060364
VERSION BD060364.1 GI:22605970
KEYWORDS JP 2001518793-A/724.
SOURCE Zea mays
ORGANISM Zea mays
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD clade; Panicoideae; Andropogoneae; Zea.
REFERENCE 1 (bases 1 to 267)
AUTHORS Jacobs,K., Mccoy,J.M., Lavallie,E.R., Racie,L.A., Merberg,D., Treacy,M., Spaulding,V. and Agostino,M.J.
TITLE Secreted expressed sequence tags (sESTs)
JOURNAL Patent: JP 2001518793-A 724 16-OCT-2001;
GENETICS INSTITUTE INC
COMMENT PN JP 2001518793-A/724
PD 16-OCT-2001
PF 10-APR-1998 JP 1998543070
PR 10-APR-1997 US 08/837312
PI KENNETH JACOBS,JOHN M MCCOY,EDWARD R LAVALLIE,LISA A RACIE, PI DAVID MERBERG,
PI MAURICE TREACY,VIKKI SPAULDING,MICHAEL J AGOSTINO PC C12N15/12,C12N5/10,C07K14/47,C12Q1/68,A61K38/17 CC Strandedness: Double;
CC Topology: Linear;
FH Key Location/Qualifiers.
FEATURES Location/Qualifiers
source 1. .267
/organism="Zea mays"
/mol_type="genomic DNA"
/db_xref="taxon:4577"

Query Match 0.8%; Score 21; DB 1; Length 267;
Best Local Similarity 49.5%; Pred. No. 66;
Matches 54; Conservative 0; Mismatches 55; Indels 0; Gaps 0;

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Qy       2085 GCTTCTTGTACCTTGATAGGCATCTCTTTCTCAAGGTTAGGAAATTTTTCTTTTTTGGTT 2144
              | | | |  ||||  |      ||||  | ||   ||  |    |||||| |   |
Db        243 GATGCATTGACCTCAAACACTCTCTCAGTATCCCATTTCTGTTGGATTTCTTTCTCAATC 184

Qy       2145 TTCTTGAAAATATTTTCCCTGCTTTTGACCTGCCTTCTTCCCCTTCCTC 2193
              ||||| ||||  |   |  ||  | |  | |  |||    || || | |
Db        183 TTCTTCAAAAAGTCCACTTTGGCTGTTCCTTTTCTTTCCGCCATTGCAC 135
```

RESULT 102
AF515269
LOCUS AF515269 1722 bp mRNA linear VRT 15-NOV-2002
DEFINITION Danio rerio coagulation factor VIIi mRNA, complete cds.
ACCESSION AF515269
VERSION AF515269.1 GI:25005098
KEYWORDS .
SOURCE Danio rerio (zebrafish)
ORGANISM Danio rerio
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes; Cyprinidae; Danio.
REFERENCE 1 (bases 1 to 1722)
AUTHORS Hanumanthaiah,R., Day,K. and Jagadeeswaran,P.
TITLE Comprehensive analysis of blood coagulation pathways in teleostei: Evolution of coagulation factor genes and identification of zebrafish factor VIIi
JOURNAL Blood Cells Mol. Dis. (2002) In press
REFERENCE 2 (bases 1 to 1722)
AUTHORS Jagadeeswaran,P. and Hanumanthaiah,R.
TITLE Direct Submission
JOURNAL Submitted (24-MAY-2002) Cellular & Structural Biology, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78229, USA
FEATURES Location/Qualifiers
source 1. .1722
/organism="Danio rerio"
/mol_type="mRNA"
/db_xref="taxon:7955"
CDS 27. .1358
/note="clotting factor"
/codon_start=1
/product="coagulation factor VIIi"
/protein_id="AAN71000.1"
/db_xref="GI:25005099"
/translation="MTLGAAAVLLCVLTLRSTSAVFLSKDEASALLQRFRRANSGFLE
EMKAGNLERECVEEICDYEEAREVFEDDDRTKQFWLSYSNKEPCLTNPCRNNGTCVYL
ADSYYCLCSEGYEGKYCEKGLEETLKCQYVNGGCEQFCDGSGARRSCSCAEGYALADD
GTSCVSQVDYPCGKIPVQKNTSQNQFLGGIHCPRGHCPWQVLIDYNGESVCGGALLEG
PWLITAAHCVHQKDTRFLKAVTGEHDLDVLDGSEEPYEVSAVFIHPNYDPETLDSDLA
LLRLRVPVQRSLYAVPICLPTPQLARSELWAARFHTLSGWGTRTAGHNLRREKGLKGP
ASGTLQRLAVPLLPAAQCGNANTTANMFCAGYTEGDHASCRGHDGSPLVTRYGETSFL
TGVVSWGRGCGPPGYYWIYTKVENFLIWMDTVMKTNTEDKSEQIANVSTKN"

Query Match 0.8%; Score 21; DB 1; Length 1722;
Best Local Similarity 56.5%; Pred. No. 79;
Matches 39; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

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Qy       1898 TTCTTACATTTTGAGTTTCTATTGGAAAAGTCAGGTGTAATTCTAATACATCTGCCTTTA 1957
              | ||| ||   | | | |  || |  |||  ||  | ||| | ||||  ||   | | ||
Db       1464 TACTTCCACCCTCATTCTGGATGGATAAATGCATATATAAATATAATTAATAAACATATA 1523

Qy       1958 TATGTTAAT 1966
                || ||| |
Db       1524 AATCTTAGT 1532
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RESULT 103
RATCFX/c
LOCUS RATCFX 484 bp DNA linear ROD 05-FEB-1999
DEFINITION Rat gene for coagulation factors X, partial cds.
ACCESSION D21215
VERSION D21215.1 GI:415309
KEYWORDS coagulation factor X.
SOURCE Rattus norvegicus (Norway rat)
ORGANISM Rattus norvegicus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
REFERENCE 1 (bases 1 to 484)
AUTHORS Murakawa,M., Okamura,T., Kamura,T., Kuroiwa,M., Harada,M. and Niho,Y.
TITLE Analysis of the partial nucleotide sequences and deduced primary structures of the protease domains of mammalian blood coagulation factors VII and X
JOURNAL Eur. J. Haematol. 52 (3), 162-168 (1994)
MEDLINE 94222160
PUBMED 8168596
REFERENCE 2 (bases 1 to 484)
AUTHORS Murakawa,M.
TITLE Direct Submission
JOURNAL Submitted (18-OCT-1993) Masahiro Murakawa, Harasanshin General Hospital, Division of Hematology; 1-8 Taihaku-machi, Hakata-ku, Fukuoka, Fukuoka 812, Japan (Tel:092-291-3434, Fax:092-291-3266)
COMMENT Submitted (18-Oct-1993) to DDBJ by:
Masahiro Murakawa
Division of Hemotology
Harasanshin General Hospiral
1-8 Taihaku-machi, Hakata-ku
Fukuoka, Fukuoka 812

```
            Japan
            Phone: 092-291-3434
            Fax  : 092-291-3266.
FEATURES              Location/Qualifiers
     source           1. .484
                      /organism="Rattus norvegicus"
                      /mol_type="genomic DNA"
                      /db_xref="taxon:10116"
     CDS              <1. .>484
                      /codon_start=2
                      /product="coagulation factor X"
                      /protein_id="BAA04756.1"
                      /db_xref="GI:455396"
                      /translation="DGGEMVHEVDMIIKHNKFQRDTYDFDIAMLRLKTPITFRENVAP
                      ACLPQKDWAEATLMTQKTGIVSGFGRTHEKGRQSKVLKMMEVPYVGRNTCRLSTSFSI
                      TQNMFCAGYDAKQEDACQGDSGGPHVTRFKDTYFVTGIVSWGEGCARKGKYGIYTKVT
                      A"

  Query Match             0.8%;  Score 20.8;  DB 1;  Length 484;
  Best Local Similarity   57.8%;  Pred. No. 80;
  Matches   37;  Conservative    0;  Mismatches   27;  Indels    0;  Gaps    0;

Qy       1179 GTGTTTGGTGCATAGACATTAAGAATTGCAATGTCCTCTTGGTGGATTTTCCTTTGATGC 1238
             ||| | || |  |   |    | || || ||||||||     || | | | ||| ||| |
Db        111 GTGATGGGGGTCTTCAGCCTCAGCATGGCAATGTCGAAGTCGTAGGTGTCCCTCTGAAAC 52

Qy       1239 CTAT 1242
              | |
Db         51 TTGT 48


RESULT 104
AX524243
LOCUS       AX524243                341 bp    DNA     linear   PAT 21-NOV-2002
DEFINITION  Sequence 273 from Patent EP1236798.
ACCESSION   AX524243
VERSION     AX524243.1  GI:25169339
KEYWORDS    .
SOURCE      Mus musculus (house mouse)
  ORGANISM  Mus musculus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE   1
  AUTHORS   Hoefer,M., Hofmann,M., Kaiser,C., Kranz,H., Loebbert,R. and
            Schlueter,T.
  TITLE     Gene library and method for its production
  JOURNAL   Patent: EP 1236798-A 273 04-SEP-2002;
            LION Bioscience AG (DE)
FEATURES              Location/Qualifiers
     source           1. .341
                      /organism="Mus musculus"
                      /mol_type="unassigned DNA"
                      /db_xref="taxon:10090"

  Query Match             0.8%;  Score 20.6;  DB 1;  Length 341;
  Best Local Similarity   53.0%;  Pred. No. 87;
  Matches   44;  Conservative    0;  Mismatches   39;  Indels    0;  Gaps    0;

Qy       2569 TGCCTTGTGCTTCAGCTATGTTGCATTCTCAGGGCCTATTGTAATAGGGTTTTAGCAGGG 2628
             || |||   || || | || |  | | | ||  || |     |    |  ||| | |||
Db        213 TGTCTTTGCCTCCACCCATCTCTCCTGCACACAGCATGACATCTGTGACTTTCTGTAGGT 272

Qy       2629 ACATATTGTCCTGGTTGTTATTG 2651
             | |  ||| |   ||| | ||||
Db        273 AGACTTTGGCACAGTTCTCATTG 295


RESULT 105
AX552981
LOCUS       AX552981                341 bp    DNA     linear   PAT 27-NOV-2002
DEFINITION  Sequence 273 from Patent WO02074953.
ACCESSION   AX552981
VERSION     AX552981.1  GI:25896981
KEYWORDS    .
SOURCE      Mus musculus (house mouse)
  ORGANISM  Mus musculus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE   1
  AUTHORS   Hoefer,M., Hofmann,M., Kaiser,C., Kranz,H., Loebbert,R. and
            Schlueter,T.
  TITLE     Gene library and a method for producing the same
  JOURNAL   Patent: WO 02074953-A 273 26-SEP-2002;
            LION Bioscience AG (DE)
FEATURES              Location/Qualifiers
     source           1. .341
                      /organism="Mus musculus"
                      /mol_type="unassigned DNA"
                      /db_xref="taxon:10090"

  Query Match             0.8%;  Score 20.6;  DB 1;  Length 341;
  Best Local Similarity   53.0%;  Pred. No. 87;
  Matches   44;  Conservative    0;  Mismatches   39;  Indels    0;  Gaps    0;

Qy       2569 TGCCTTGTGCTTCAGCTATGTTGCATTCTCAGGGCCTATTGTAATAGGGTTTTAGCAGGG 2628
             || |||   || || | || |  | | | ||  || |     |    |  ||| | |||
Db        213 TGTCTTTGCCTCCACCCATCTCTCCTGCACACAGCATGACATCTGTGACTTTCTGTAGGT 272

Qy       2629 ACATATTGTCCTGGTTGTTATTG 2651
             | |  ||| |   ||| | ||||
Db        273 AGACTTTGGCACAGTTCTCATTG 295


RESULT 106
E63001/c
LOCUS       E63001                  1206 bp    DNA     linear   PAT 31-JAN-2002
DEFINITION  Hemocoagulation factor VII modification.
ACCESSION   E63001
VERSION     E63001.1  GI:18633643
KEYWORDS    JP 2001061479-A/5.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 1206)
  AUTHORS   Fukushima,K., Mizuguchi,J., Yuguchi,M., Nakagaki,T. and Iwanaga,S.
  TITLE     Hemocoagulation factor VII modification
  JOURNAL   Patent: JP 2001061479-A 5 13-MAR-2001;
            JURIDICAL FOUNDATION THE CHEMO SERO THERAPEUTIC RESEARCH INSTITUTE
COMMENT     OS   Artificial Sequence
            PN   JP 2001061479-A/5
            PD   13-MAR-2001
            PF   24-AUG-1999 JP 1999237610
            PR
            PI   KENJI FUKUSHIMA,JUN MIZUGUCHI,MASATO YUGUCHI,TOMOHIRO
            NAKAGAKI,
            PI   SADAAKI IWANAGA
            PC   C12N15/09,A61K38/43,A61P7/04,C07K14/755,C12N9/76,C12N15/00, PC
              A61K37/465
            CC
            FH   Key             Location/Qualifiers
            FT   source          1. .1206
            FT                   /organism='Artificial Sequence'.
FEATURES              Location/Qualifiers
     source           1. .1206
                      /organism="synthetic construct"
                      /mol_type="genomic DNA"
                      /db_xref="taxon:32630"

  Query Match             0.8%;  Score 20.6;  DB 1;  Length 1206;
  Best Local Similarity   59.3%;  Pred. No. 98;
  Matches   35;  Conservative    0;  Mismatches   24;  Indels    0;  Gaps    0;

Qy        876 TTCAATTGTCTTTTATCTGTCGAGACTTGCTTTGTTTTGAAATATGTATTCAATTTTGG 934
              ||   | |  |||  | | || ||| | | | | |||  | ||   ||||||| | |||
Db        444 TTTGCTGGCATTTCTTTTTTCTAGAATAGGTATTTTTCCACATGGATATTCAACTGTGG 386
```

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RESULT 107
E63002/c
LOCUS       E63002                  1206 bp    DNA     linear   PAT 31-JAN-2002
DEFINITION  Hemocoagulation factor VII modification.
ACCESSION   E63002
VERSION     E63002.1  GI:18633644
KEYWORDS    JP 2001061479-A/6.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 1206)
  AUTHORS   Fukushima,K., Mizuguchi,J., Yuguchi,M., Nakagaki,T. and Iwanaga,S.
  TITLE     Hemocoagulation factor VII modification
  JOURNAL   Patent: JP 2001061479-A 6 13-MAR-2001;
            JURIDICAL FOUNDATION THE CHEMO SERO THERAPEUTIC RESEARCH INSTITUTE
COMMENT     OS   Artificial Sequence
            PN   JP 2001061479-A/6
            PD   13-MAR-2001
            PF   24-AUG-1999 JP 1999237610
            PR
            PI   KENJI FUKUSHIMA,JUN MIZUGUCHI,MASATO YUGUCHI,TOMOHIRO
            NAKAGAKI,
            PI   SADAAKI IWANAGA
            PC   C12N15/09,A61K38/43,A61P7/04,C07K14/755,C12N9/76,C12N15/00, PC
              A61K37/465
            CC
            FH   Key             Location/Qualifiers
            FT   source          1. .1206
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .1206
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.8%;  Score 20.6;  DB 1;  Length 1206;
  Best Local Similarity   59.3%;  Pred. No. 98;
  Matches   35;  Conservative    0;  Mismatches   24;  Indels    0;  Gaps    0;

Qy        876 TTCAATTGTCTTTTATCTGTCGAGACTTGCTTTGTTTTGAAATATGTATTCAATTTTGG 934
              ||   | |  |||  | | || ||| | | | | |||  | ||   |||||| | |||
Db        444 TTTGCTGGCATTTCTTTTTTCTAGAATAGGTATTTTTCCACATGGATATTCAACTGTGG 386


RESULT 108
E62997/c
LOCUS       E62997                  1221 bp    DNA     linear   PAT 31-JAN-2002
DEFINITION  Hemocoagulation factor VII modification.
ACCESSION   E62997
VERSION     E62997.1  GI:18633639
KEYWORDS    JP 2001061479-A/1.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 1221)
  AUTHORS   Fukushima,K., Mizuguchi,J., Yuguchi,M., Nakagaki,T. and Iwanaga,S.
  TITLE     Hemocoagulation factor VII modification
  JOURNAL   Patent: JP 2001061479-A 1 13-MAR-2001;
            JURIDICAL FOUNDATION THE CHEMO SERO THERAPEUTIC RESEARCH INSTITUTE
COMMENT     OS   blood coagulation factor VII
            PN   JP 2001061479-A/1
            PD   13-MAR-2001
            PF   24-AUG-1999 JP 1999237610
            PR
            PI   KENJI FUKUSHIMA,JUN MIZUGUCHI,MASATO YUGUCHI,TOMOHIRO
            NAKAGAKI,
            PI   SADAAKI IWANAGA
            PC   C12N15/09,A61K38/43,A61P7/04,C07K14/755,C12N9/76,C12N15/00, PC
              A61K37/465
            CC
            FH   Key             Location/Qualifiers
            FT   source          1. .1221
            FT                   /organism='blood coagulation factor VII'.
FEATURES             Location/Qualifiers
     source          1. .1221
                     /organism="unidentified"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32644"

  Query Match             0.8%;  Score 20.6;  DB 1;  Length 1221;
  Best Local Similarity   59.3%;  Pred. No. 98;
  Matches   35;  Conservative    0;  Mismatches   24;  Indels    0;  Gaps    0;

Qy        876 TTCAATTGTCTTTTATCTGTCGAGACTTGCTTTGTTTTGAAATATGTATTCAATTTTGG 934
              ||   | |  |||  | | || ||| | | | | |||  | ||   |||||| | |||
Db        444 TTTGCTGGCATTTCTTTTTTCTAGAATAGGTATTTTTCCACATGGATATTCAACTGTGG 386


RESULT 109
E62998/c
LOCUS       E62998                  1221 bp    DNA     linear   PAT 31-JAN-2002
DEFINITION  Hemocoagulation factor VII modification.
ACCESSION   E62998
VERSION     E62998.1  GI:18633640
KEYWORDS    JP 2001061479-A/2.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 1221)
  AUTHORS   Fukushima,K., Mizuguchi,J., Yuguchi,M., Nakagaki,T. and Iwanaga,S.
  TITLE     Hemocoagulation factor VII modification
  JOURNAL   Patent: JP 2001061479-A 2 13-MAR-2001;
            JURIDICAL FOUNDATION THE CHEMO SERO THERAPEUTIC RESEARCH INSTITUTE
COMMENT     OS   Artificial Sequence
            PN   JP 2001061479-A/2
            PD   13-MAR-2001
            PF   24-AUG-1999 JP 1999237610
            PR
            PI   KENJI FUKUSHIMA,JUN MIZUGUCHI,MASATO YUGUCHI,TOMOHIRO
            NAKAGAKI,
            PI   SADAAKI IWANAGA
            PC   C12N15/09,A61K38/43,A61P7/04,C07K14/755,C12N9/76,C12N15/00, PC
              A61K37/465
            CC
            FH   Key             Location/Qualifiers
            FT   source          1. .1221
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .1221
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.8%;  Score 20.6;  DB 1;  Length 1221;
  Best Local Similarity   59.3%;  Pred. No. 98;
  Matches   35;  Conservative    0;  Mismatches   24;  Indels    0;  Gaps    0;

Qy        876 TTCAATTGTCTTTTATCTGTCGAGACTTGCTTTGTTTTGAAATATGTATTCAATTTTGG 934
              ||   | |  |||  | | || ||| | | | | |||  | ||   |||||| | |||
Db        444 TTTGCTGGCATTTCTTTTTTCTAGAATAGGTATTTTTCCACATGGATATTCAACTGTGG 386


RESULT 110
E62999/c
LOCUS       E62999                  1221 bp    DNA     linear   PAT 31-JAN-2002
DEFINITION  Hemocoagulation factor VII modification.
ACCESSION   E62999
VERSION     E62999.1  GI:18633641
KEYWORDS    JP 2001061479-A/3.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 1221)
  AUTHORS   Fukushima,K., Mizuguchi,J., Yuguchi,M., Nakagaki,T. and Iwanaga,S.
  TITLE     Hemocoagulation factor VII modification
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  JOURNAL    Patent: JP 2001061479-A 3 13-MAR-2001;
             JURIDICAL FOUNDATION THE CHEMO SERO THERAPEUTIC RESEARCH INSTITUTE
COMMENT      OS   Artificial Sequence
             PN   JP 2001061479-A/3
             PD   13-MAR-2001
             PF   24-AUG-1999 JP 1999237610
             PR
             PI   KENJI FUKUSHIMA,JUN MIZUGUCHI,MASATO YUGUCHI,TOMOHIRO
             NAKAGAKI,
             PI   SADAAKI IWANAGA
             PC   C12N15/09,A61K38/43,A61P7/04,C07K14/755,C12N9/76,C12N15/00, PC
               A61K37/465
             CC
             FH   Key             Location/Qualifiers
             FT   source          1. .1221
             FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .1221
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.8%;  Score 20.6;  DB 1;  Length 1221;
  Best Local Similarity   59.3%;  Pred. No. 98;
  Matches   35;  Conservative    0;  Mismatches   24;  Indels    0;  Gaps    0;

Qy        876 TTCAATTGTCTTTTATCTGTCGAGACTTGCTTTGTTTTGAAATATGTATTCAATTTTGG 934
              ||   | |  |||  | | || ||| | | | | |||  | ||   ||||||| | |||
Db        444 TTTGCTGGCATTTCTTTTTTCTAGAATAGGTATTTTTCCACATGGATATTCAACTGTGG 386


RESULT 111
E63000/c
LOCUS       E63000                  1221 bp    DNA     linear   PAT 31-JAN-2002
DEFINITION  Hemocoagulation factor VII modification.
ACCESSION   E63000
VERSION     E63000.1  GI:18633642
KEYWORDS    JP 2001061479-A/4.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 1221)
  AUTHORS   Fukushima,K., Mizuguchi,J., Yuguchi,M., Nakagaki,T. and Iwanaga,S.
  TITLE     Hemocoagulation factor VII modification
  JOURNAL   Patent: JP 2001061479-A 4 13-MAR-2001;
            JURIDICAL FOUNDATION THE CHEMO SERO THERAPEUTIC RESEARCH INSTITUTE
COMMENT     OS   Artificial Sequence
            PN   JP 2001061479-A/4
            PD   13-MAR-2001
            PF   24-AUG-1999 JP 1999237610
            PR
            PI   KENJI FUKUSHIMA,JUN MIZUGUCHI,MASATO YUGUCHI,TOMOHIRO
            NAKAGAKI,
            PI   SADAAKI IWANAGA
            PC   C12N15/09,A61K38/43,A61P7/04,C07K14/755,C12N9/76,C12N15/00, PC
              A61K37/465
            CC
            FH   Key             Location/Qualifiers
            FT   source          1. .1221
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .1221
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.8%;  Score 20.6;  DB 1;  Length 1221;
  Best Local Similarity   59.3%;  Pred. No. 98;
  Matches   35;  Conservative    0;  Mismatches   24;  Indels    0;  Gaps    0;

Qy        876 TTCAATTGTCTTTTATCTGTCGAGACTTGCTTTGTTTTGAAATATGTATTCAATTTTGG 934
              ||   | |  |||  | | || ||| | | | | |||  | ||   ||||||| | |||
Db        444 TTTGCTGGCATTTCTTTTTTCTAGAATAGGTATTTTTCCACATGGATATTCAACTGTGG 386


RESULT 112
AR112953/c
LOCUS       AR112953                1440 bp    DNA     linear   PAT 16-MAY-2001
DEFINITION  Sequence 13 from patent US 6132729.
ACCESSION   AR112953
VERSION     AR112953.1  GI:14093275
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 1440)
  AUTHORS   Thorpe,P.E., King,S.W. and Gao,B.
  TITLE     Combined tissue factor and chemotherapeutic methods and
            compositions for coagulation and tumor treatment
  JOURNAL   Patent: US 6132729-A 13 17-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .1440
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.8%;  Score 20.6;  DB 1;  Length 1440;
  Best Local Similarity   59.3%;  Pred. No. 99;
  Matches   35;  Conservative    0;  Mismatches   24;  Indels    0;  Gaps    0;

Qy        876 TTCAATTGTCTTTTATCTGTCGAGACTTGCTTTGTTTTGAAATATGTATTCAATTTTGG 934
              ||   | |  |||  | | || ||| | | | | |||  | ||   ||||||| | |||
Db        659 TTTGCTGGCATTTCTTTTTTCTAGAATAGGTATTTTTCCACATGGATATTCAACTGTGG 601


RESULT 113
AR112969/c
LOCUS       AR112969                1440 bp    DNA     linear   PAT 16-MAY-2001
DEFINITION  Sequence 13 from patent US 6132730.
ACCESSION   AR112969
VERSION     AR112969.1  GI:14093291
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 1440)
  AUTHORS   Thorpe,P.E., King,S.W. and Gao,B.
  TITLE     Combined tissue factor and factor VIIa methods and compositions for
            coagulation and tumor treatment
  JOURNAL   Patent: US 6132730-A 13 17-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .1440
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.8%;  Score 20.6;  DB 1;  Length 1440;
  Best Local Similarity   59.3%;  Pred. No. 99;
  Matches   35;  Conservative    0;  Mismatches   24;  Indels    0;  Gaps    0;

Qy        876 TTCAATTGTCTTTTATCTGTCGAGACTTGCTTTGTTTTGAAATATGTATTCAATTTTGG 934
              ||   | |  |||  | | || ||| | | | | |||  | ||   ||||||| | |||
Db        659 TTTGCTGGCATTTCTTTTTTCTAGAATAGGTATTTTTCCACATGGATATTCAACTGTGG 601


RESULT 114
I19358/c
LOCUS       I19358                  1440 bp    DNA     linear   PAT 07-OCT-1996
DEFINITION  Sequence 3 from patent US 5504064.
ACCESSION   I19358
VERSION     I19358.1  GI:1599713
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 1440)
  AUTHORS   Morrissey,J.H. and Comp,P.C.
  TITLE     Treatment of bleeding with modified tissue factor in combination
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            with an activator of FVII
  JOURNAL   Patent: US 5504064-A 3 02-APR-1996;
FEATURES             Location/Qualifiers
     source          1. .1440
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.8%;  Score 20.6;  DB 1;  Length 1440;
  Best Local Similarity   59.3%;  Pred. No. 99;
  Matches   35;  Conservative    0;  Mismatches   24;  Indels    0;  Gaps    0;

Qy        876 TTCAATTGTCTTTTATCTGTCGAGACTTGCTTTGTTTTGAAATATGTATTCAATTTTGG 934
              ||   | |  |||  | | || ||| | | | | |||  | ||   ||||||| | |||
Db        659 TTTGCTGGCATTTCTTTTTTCTAGAATAGGTATTTTTCCACATGGATATTCAACTGTGG 601


RESULT 115
I19360/c
LOCUS       I19360                  1440 bp    DNA     linear   PAT 07-OCT-1996
DEFINITION  Sequence 3 from patent US 5504067.
ACCESSION   I19360
VERSION     I19360.1  GI:1599715
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 1440)
  AUTHORS   Morrissey,J.H. and Comp,P.C.
  TITLE     Treatment of bleeding with modified tissue factor in combination
            with FVII
  JOURNAL   Patent: US 5504067-A 3 02-APR-1996;
FEATURES             Location/Qualifiers
     source          1. .1440
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.8%;  Score 20.6;  DB 1;  Length 1440;
  Best Local Similarity   59.3%;  Pred. No. 99;
  Matches   35;  Conservative    0;  Mismatches   24;  Indels    0;  Gaps    0;

Qy        876 TTCAATTGTCTTTTATCTGTCGAGACTTGCTTTGTTTTGAAATATGTATTCAATTTTGG 934
              ||   | |  |||  | | || ||| | | | | |||  | ||   ||||||| | |||
Db        659 TTTGCTGGCATTTCTTTTTTCTAGAATAGGTATTTTTCCACATGGATATTCAACTGTGG 601


RESULT 116
BD194674/c
LOCUS       BD194674                1440 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Tissue factor methods and compositions for coagulation and tumor
            treatment.
ACCESSION   BD194674
VERSION     BD194674.1  GI:33004420
KEYWORDS    JP 2002514201-A/3.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 1440)
  AUTHORS   Thorpe,P.E., King,S.W. and Gao,B.
  TITLE     Tissue factor methods and compositions for coagulation and tumor
            treatment
  JOURNAL   Patent: JP 2002514201-A 3 14-MAY-2002;
            BOARD OF REGENTS THE UNIVERSITY OF TEXAS SYSTEM
COMMENT     OS   Mammalian
            PN   JP 2002514201-A/3
            PD   14-MAY-2002
            PF   20-JAN-1998 JP 1998534630
            PR   22-JAN-1997 US    60/035920,27-JAN-1997 US    60/036205 PR
            27-MAR-1997 US    60/042427
            PI   PHILIP E THORPE,STEVEN W KING,BONING GAO
            PC   A61K47/48
            CC   Tissue factor methods and compositions for coagulation and  CC
                 tumor treatment
            FH   Key             Location/Qualifiers
            FT   source          1. .1440
            FT                   /organism='Mammalian'.
FEATURES             Location/Qualifiers
     source          1. .1440
                     /organism="unidentified"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32644"

  Query Match             0.8%;  Score 20.6;  DB 1;  Length 1440;
  Best Local Similarity   59.3%;  Pred. No. 99;
  Matches   35;  Conservative    0;  Mismatches   24;  Indels    0;  Gaps    0;

Qy        876 TTCAATTGTCTTTTATCTGTCGAGACTTGCTTTGTTTTGAAATATGTATTCAATTTTGG 934
              ||   | |  |||  | | || ||| | | | | |||  | ||   ||||||| | |||
Db        659 TTTGCTGGCATTTCTTTTTTCTAGAATAGGTATTTTTCCACATGGATATTCAACTGTGG 601


RESULT 117
AX908508
LOCUS       AX908508                223 bp    DNA     linear   PAT 18-DEC-2003
DEFINITION  Sequence 24371 from Patent EP1033401.
ACCESSION   AX908508
VERSION     AX908508.1  GI:40064588
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Dumas Milne Edwards,J.B., Duclert,A. and Giordano,J.Y.
  TITLE     Expressed sequence tags and encoded human proteins
  JOURNAL   Patent: EP 1033401-A 24371 06-SEP-2000;
            Genset (FR)
FEATURES             Location/Qualifiers
     source          1. .223
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.8%;  Score 20.4;  DB 1;  Length 223;
  Best Local Similarity   58.1%;  Pred. No. 93;
  Matches   36;  Conservative    0;  Mismatches   26;  Indels    0;  Gaps    0;

Qy       1538 TTGCACTTGTGAAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1597
              ||||||| ||      ||||     |    || || |  ||  | ||||| ||| |||||
Db          4 TTGCACTGGTTGGAGTTGTGGAGACGGCCTTGAGTCTCAGTACGAGTGTGCGTGAGTGTG 63

Qy       1598 TG 1599
              |
Db         64 AG 65


RESULT 118
BD044041
LOCUS       BD044041                223 bp    DNA     linear   PAT 27-AUG-2002
DEFINITION  Sequence tag and encoded human protein.
ACCESSION   BD044041
VERSION     BD044041.1  GI:22585783
KEYWORDS    JP 2001269182-A/20287.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 223)
  AUTHORS   Edwards,J.B.D.M., Duclair,E. and Jordan,J.Y.
  TITLE     Sequence tag and encoded human protein
  JOURNAL   Patent: JP 2001269182-A 20287 02-OCT-2001;
            GENSET
COMMENT     OS   Homo sapiens (human)
            PN   JP 2001269182-A/20287
            PD   02-OCT-2001
            PF   24-FEB-2000 JP 2000118773
            PR   26-FEB-1999 US    60/122487
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            PI   JEAN BAPUTIST DUMAS MILNE EDWARDS,EIMERIC DUCLAIR,JEAN YVES
            PI   JORDAN
            PC   C12N15/09,C07K14/435,C07K16/18,C12N1/15,C12N1/19,C12N1/21, PC
             C12N5/10,
            PC   C12P21/02,C12P21/08,C12Q1/68//G06F17/30,C12N15/00,C12N5/00, PC
              G06F15/40
            CC
            FH   Key             Location/Qualifiers.
FEATURES             Location/Qualifiers
     source          1. .223
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"

  Query Match             0.8%;  Score 20.4;  DB 1;  Length 223;
  Best Local Similarity   58.1%;  Pred. No. 93;
  Matches   36;  Conservative    0;  Mismatches   26;  Indels    0;  Gaps    0;

Qy       1538 TTGCACTTGTGAAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1597
             ||||||| ||      ||||     |    || || |  ||  | ||||| ||| |||||
Db          4 TTGCACTGGTTGGAGTTGTGGAGACGGCCTTGAGTCTCAGTACGAGTGTGCGTGAGTGTG 63

Qy       1598 TG 1599
              |
Db         64 AG 65


RESULT 119
AF306917
LOCUS       AF306917                280 bp    DNA     linear   VRT 23-JAN-2001
DEFINITION  Brachyramphus brevirostris haplotype KME ribosomal protein 40 gene,
            intron 5 and partial sequence.
ACCESSION   AF306917
VERSION     AF306917.1  GI:12382289
KEYWORDS    .
SOURCE      Brachyramphus brevirostris
  ORGANISM  Brachyramphus brevirostris
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Archosauria; Aves; Neognathae; Charadriiformes; Alcidae;
            Brachyramphus.
REFERENCE   1  (bases 1 to 280)
  AUTHORS   Pacheco,N.M. and Friesen,V.L.
  TITLE     A molecular investigation of hybridization in Brachyramphus
            murrelets
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 280)
  AUTHORS   Pacheco,N.M. and Friesen,V.L.
  TITLE     Direct Submission
  JOURNAL   Submitted (21-SEP-2000) Department of Biology, Queen's University,
            Kingston, ON K7L 3N6, Canada
FEATURES             Location/Qualifiers
     source          1. .280
                     /organism="Brachyramphus brevirostris"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:28693"
                     /haplotype="KME"
     mRNA            join(<1. .14,264. .>280)
                     /product="ribosomal protein 40"
                     /note="coding region not determined"
     intron          15. .263
                     /number=5

  Query Match             0.8%;  Score 20.4;  DB 1;  Length 280;
  Best Local Similarity   50.0%;  Pred. No. 96;
  Matches   51;  Conservative    0;  Mismatches   51;  Indels    0;  Gaps    0;

Qy       1545 TGTGAAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1604
             ||   | |  || |    ||  ||  ||||||||      || ||||   ||||  |
Db        145 TGGTTAATTAGTCTTGTCGTTGGTTGGTGTGTGTTGTCTGGTATGTGATAGTGTAGGGTG 204

Qy       1605 GTGTGTGTGTCTGTGTCTGTGTCTTGTGTGTCTGTGTTCTCT 1646
             ||| |    |    ||  | | |||  |   || | ||||  |
Db        205 GTGAGGTGTTTCCGGTGGGAGACTTAGGCTACTCTCTTCTGT 246


RESULT 120
AF306913
LOCUS       AF306913                280 bp    DNA     linear   VRT 23-JAN-2001
DEFINITION  Brachyramphus brevirostris haplotype KMA ribosomal protein 40 gene,
            intron 5 and partial sequence.
ACCESSION   AF306913
VERSION     AF306913.1  GI:12382285
KEYWORDS    .
SOURCE      Brachyramphus brevirostris
  ORGANISM  Brachyramphus brevirostris
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Archosauria; Aves; Neognathae; Charadriiformes; Alcidae;
            Brachyramphus.
REFERENCE   1  (bases 1 to 280)
  AUTHORS   Pacheco,N.M. and Friesen,V.L.
  TITLE     A molecular investigation of hybridization in Brachyramphus
            murrelets
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 280)
  AUTHORS   Pacheco,N.M. and Friesen,V.L.
  TITLE     Direct Submission
  JOURNAL   Submitted (21-SEP-2000) Department of Biology, Queen's University,
            Kingston, ON K7L 3N6, Canada
FEATURES             Location/Qualifiers
     source          1. .280
                     /organism="Brachyramphus brevirostris"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:28693"
                     /haplotype="KMA"
     mRNA            join(<1. .14,264. .>280)
                     /product="ribosomal protein 40"
                     /note="coding region not determined"
     intron          15. .263
                     /number=5

  Query Match             0.8%;  Score 20.4;  DB 1;  Length 280;
  Best Local Similarity   50.0%;  Pred. No. 96;
  Matches   51;  Conservative    0;  Mismatches   51;  Indels    0;  Gaps    0;

Qy       1545 TGTGAAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1604
             ||   | |  || |    ||  ||  ||||||||      || ||||   ||||  |
Db        145 TGGTTAATTAGTCTTGTCGTTGGTTGGTGTGTGTTGTCTGGTATGTGATAGTGTAGGGTG 204

Qy       1605 GTGTGTGTGTCTGTGTCTGTGTCTTGTGTGTCTGTGTTCTCT 1646
             ||| |    |    ||  | | |||  |   || | ||||  |
Db        205 GTGAGGTGTTTCCGGTGGGAGACTTAGGCTACTCTCTTCTGT 246


RESULT 121
AF306914
LOCUS       AF306914                280 bp    DNA     linear   VRT 23-JAN-2001
DEFINITION  Brachyramphus brevirostris haplotype KMB ribosomal protein 40 gene,
            intron 5 and partial sequence.
ACCESSION   AF306914
VERSION     AF306914.1  GI:12382286
KEYWORDS    .
SOURCE      Brachyramphus brevirostris
  ORGANISM  Brachyramphus brevirostris
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Archosauria; Aves; Neognathae; Charadriiformes; Alcidae;
            Brachyramphus.
REFERENCE   1  (bases 1 to 280)
  AUTHORS   Pacheco,N.M. and Friesen,V.L.
  TITLE     A molecular investigation of hybridization in Brachyramphus
            murrelets
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 280)
  AUTHORS   Pacheco,N.M. and Friesen,V.L.
  TITLE     Direct Submission
  JOURNAL   Submitted (21-SEP-2000) Department of Biology, Queen's University,
            Kingston, ON K7L 3N6, Canada
```

```
FEATURES             Location/Qualifiers
     source          1. .280
                     /organism="Brachyramphus brevirostris"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:28693"
                     /haplotype="KMB"
     mRNA            join(<1. .14,264. .>280)
                     /product="ribosomal protein 40"
                     /note="coding region not determined"
     intron          15. .263
                     /number=5

  Query Match              0.8%;  Score 20.4;  DB 1;  Length 280;
  Best Local Similarity   50.0%;  Pred. No. 96;
  Matches   51;  Conservative    0;  Mismatches   51;  Indels    0;  Gaps    0;

Qy       1545 TGTGAAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1604
             ||   | |  || |    ||  ||  ||||||||      || ||||   ||||  |
Db        145 TGGTTAATTAGTCTTGTGGTTGGTTGGTGTGTGTTGTCTGGTATGTGATAGTGTAGGGTG 204

Qy       1605 GTGTGTGTGTCTGTGTCTGTGTCTTGTGTGTCTGTGTTCTCT 1646
              ||| |    |   ||  | | |||  |   || | |||| |
Db        205 GTGAGGTGTTTCCGGTGGGAGACTTAGGCTACTCTCTTCTGT 246


RESULT 122
AF306915
LOCUS       AF306915                280 bp    DNA     linear   VRT 23-JAN-2001
DEFINITION  Brachyramphus brevirostris haplotype KMC ribosomal protein 40 gene,
            intron 5 and partial sequence.
ACCESSION   AF306915
VERSION     AF306915.1  GI:12382287
KEYWORDS    .
SOURCE      Brachyramphus brevirostris
  ORGANISM  Brachyramphus brevirostris
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Archosauria; Aves; Neognathae; Charadriiformes; Alcidae;
            Brachyramphus.
REFERENCE   1  (bases 1 to 280)
  AUTHORS   Pacheco,N.M. and Friesen,V.L.
  TITLE     A molecular investigation of hybridization in Brachyramphus
            murrelets
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 280)
  AUTHORS   Pacheco,N.M. and Friesen,V.L.
  TITLE     Direct Submission
  JOURNAL   Submitted (21-SEP-2000) Department of Biology, Queen's University,
            Kingston, ON K7L 3N6, Canada
FEATURES             Location/Qualifiers
     source          1. .280
                     /organism="Brachyramphus brevirostris"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:28693"
                     /haplotype="KMC"
     mRNA            join(<1. .14,264. .>280)
                     /product="ribosomal protein 40"
                     /note="coding region not determined"
     intron          15. .263
                     /number=5

  Query Match              0.8%;  Score 20.4;  DB 1;  Length 280;
  Best Local Similarity   50.0%;  Pred. No. 96;
  Matches   51;  Conservative    0;  Mismatches   51;  Indels    0;  Gaps    0;

Qy       1545 TGTGAAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1604
             ||   | |  || |    ||  ||  ||||||||      || ||||   ||||  |
Db        145 TGGTTAATTAGTCTTGTGGTTGGTTGGTGTGTGTTGTCTGGTATGTGATAGTGTAGGGTG 204

Qy       1605 GTGTGTGTGTCTGTGTCTGTGTCTTGTGTGTCTGTGTTCTCT 1646
              ||| |    |   ||  | | |||  |   || | |||| |
Db        205 GTGAGGTGTTTCCGGTGGGAGACTTAGGCTACTCTCTTCTGT 246


RESULT 123
AF306919
LOCUS       AF306919                280 bp    DNA     linear   VRT 23-JAN-2001
DEFINITION  Brachyramphus brevirostris haplotype KMG ribosomal protein 40 gene,
            intron 5 and partial sequence.
ACCESSION   AF306919
VERSION     AF306919.1  GI:12382291
KEYWORDS    .
SOURCE      Brachyramphus brevirostris
  ORGANISM  Brachyramphus brevirostris
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Archosauria; Aves; Neognathae; Charadriiformes; Alcidae;
            Brachyramphus.
REFERENCE   1  (bases 1 to 280)
  AUTHORS   Pacheco,N.M. and Friesen,V.L.
  TITLE     A molecular investigation of hybridization in Brachyramphus
            murrelets
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 280)
  AUTHORS   Pacheco,N.M. and Friesen,V.L.
  TITLE     Direct Submission
  JOURNAL   Submitted (21-SEP-2000) Department of Biology, Queen's University,
            Kingston, ON K7L 3N6, Canada
FEATURES             Location/Qualifiers
     source          1. .280
                     /organism="Brachyramphus brevirostris"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:28693"
                     /haplotype="KMG"
     mRNA            join(<1. .14,264. .>280)
                     /product="ribosomal protein 40"
                     /note="coding region not determined"
     intron          15. .263
                     /number=5

  Query Match              0.8%;  Score 20.4;  DB 1;  Length 280;
  Best Local Similarity   50.0%;  Pred. No. 96;
  Matches   51;  Conservative    0;  Mismatches   51;  Indels    0;  Gaps    0;

Qy       1545 TGTGAAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1604
             ||   | |  || |    ||  ||  ||||||||      || ||||   ||||  |
Db        145 TGGTTAATTAGTCTTGTCGTTGGTTGGTGTGTGTTGTCTGGTATGTGATAGTGTAGGGTG 204

Qy       1605 GTGTGTGTGTCTGTGTCTGTGTCTTGTGTGTCTGTGTTCTCT 1646
              ||| |    |   ||  | | |||  |   || | |||| |
Db        205 GTGAGGTGTTTCCGGTGGGAGACTTAGGCTACTCTCTTCTGT 246


RESULT 124
AF266240
LOCUS       AF266240                383 bp    mRNA    linear   VRT 15-FEB-2001
DEFINITION  Gillichthys seta trypsinogen 2 precursor, mRNA, partial cds.
ACCESSION   AF266240
VERSION     AF266240.1  GI:10121759
KEYWORDS    .
SOURCE      Gillichthys seta
  ORGANISM  Gillichthys seta
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
            Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes;
            Gobioidei; Gobiidae; Gillichthys.
REFERENCE   1  (bases 1 to 383)
  AUTHORS   Gracey,A.Y., Troll,J.V. and Somero,G.N.
  TITLE     Hypoxia-induced gene expression profiling in the euryoxic fish
            Gillichthys mirabilis
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 98 (4), 1993-1998 (2001)
  MEDLINE   21117151
   PUBMED   11172064
REFERENCE   2  (bases 1 to 383)
  AUTHORS   Gracey,A.Y., Troll,J.V. and Somero,G.N.
  TITLE     Direct Submission
  JOURNAL   Submitted (10-MAY-2000) Biological Sciences, Stanford University,
            Hopkins Marine Station, Oceanview Blvd., Pacific Grove, CA 93950,
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            USA
FEATURES             Location/Qualifiers
     source          1. .383
                     /organism="Gillichthys seta"
                     /mol_type="mRNA"
                     /db_xref="taxon:79683"
                     /tissue_type="liver"
     CDS             33. .>383
                     /codon_start=1
                     /product="trypsinogen 2 precursor"
                     /protein_id="AAG13359.1"
                     /db_xref="GI:10121760"
                     /translation="MRCLVFILLIGAAFAEDDKIVGGYECTPHSQAHQVSLNSGYHFC
                     GGSLVNAEWVVSAAHCYKSRVEVRLGEHNIRLTEGTEQFISSSRVIRHPNYSSYNIDN
                     DIMLIKLSKPANLNL"

  Query Match             0.8%;  Score 20.4;  DB 1;  Length 383;
  Best Local Similarity   48.3%;  Pred. No. 1e+02;
  Matches   57;  Conservative    0;  Mismatches   61;  Indels    0;  Gaps    0;

Qy        260 TTGGAGGCTATGGCTCCTTTGATCACTCCTCCAGGAGCAGGCAGGGAAGAGCCTCAGGTG 319
              | ||||| ||||  | |     ||||||          |   |   |       ||| ||
Db         94 TCGGAGGGTATGAGTGCACCCCTCACTCTCAGGCCCACCAGGTGTCTCTGAACTCTGGAT 153

Qy        320 ATTGCTCCTCTAGATGCTGGCAGGCCCAATGATCATGTGGTCAGTCCCCTGGGTACAG 377
              ||  || || | || |||  | || | |      ||| | |  |||  |||   || |
Db        154 ATCACTTCTGTGGAGGCTCTCTGGTCAACGCGGAATGGGTTGTGTCTGCTGCTCACTG 211


RESULT 125
AX839180/c
LOCUS       AX839180                 394 bp    DNA     linear   PAT 15-DEC-2003
DEFINITION  Sequence 23 from Patent WO03076610.
ACCESSION   AX839180
VERSION     AX839180.1  GI:39922629
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Bracco,L., Brinkman,B. and Coignard,F.
  TITLE     Variants of human kallikrein-2 and kallikrein-3 and uses thereof
  JOURNAL   Patent: WO 03076610-A 23 18-SEP-2003;
            Exonhit Therapeutics S.A. (FR)
FEATURES             Location/Qualifiers
     source          1. .394
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.8%;  Score 20.4;  DB 1;  Length 394;
  Best Local Similarity   52.3%;  Pred. No. 1e+02;
  Matches   45;  Conservative    0;  Mismatches   41;  Indels    0;  Gaps    0;

Qy        474 CAATGGTTGTTGATGTGGTAGAGTATCTCATACAGAGGATAGCACTAGATGCTGTCTGGG 533
              || ||| |   || |   ||||| |   || | ||||   | |   |  | |  |||
Db        272 CACTGGCTAGAGAGGGACTAGAGAAGGACAGAGAGAGGGGGGGATATGGAGATTCCTGAT 213

Qy        534 ACATAGGTAAGCTTTCCAGAGAGACT 559
               ||  ||  |||| |   ||   |||
Db        212 GCAGTGGGCAGCTGTGAGGACCCACT 187


RESULT 126
AF465275
LOCUS       AF465275                1293 bp    mRNA    linear   VRT 02-FEB-2003
DEFINITION  Takifugu rubripes coagulation factor VIIc precursor, mRNA, complete
            cds.
ACCESSION   AF465275
VERSION     AF465275.1  GI:28194021
KEYWORDS    .
SOURCE      Takifugu rubripes (Fugu rubripes)
  ORGANISM  Takifugu rubripes
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
            Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;
            Tetradontoidea; Tetraodontidae; Takifugu.
REFERENCE   1  (bases 1 to 1293)
  AUTHORS   Davidson,C.J., Hirt,R.P., Lal,K., Snell,P., Elgar,G.,
            Tuddenham,E.G.D. and McVey,J.H.
  TITLE     Comparative sequence analysis and molecular evolution of blood
            coagulation genes from Gallus gallus and Fugu rubripes
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 1293)
  AUTHORS   McVey,J.H., Davidson,C.J., Lal,K., Snell,P. and Elgar,G.
  TITLE     Direct Submission
  JOURNAL   Submitted (04-JAN-2002) Haemostasis Group, MRC Clinical Sciences
            Centre, The Faculty of Medicine, Imperial College, Hammersmith
            Campus, Du Cane Road, London W12 0NN, UK
FEATURES             Location/Qualifiers
     source          1. .1293
                     /organism="Takifugu rubripes"
                     /mol_type="mRNA"
                     /db_xref="taxon:31033"
     CDS             1. .1293
                     /EC_number="3.4.21.21"
                     /function="serum prothrombinconversion accelerator"
                     /note="vitamin K dependent serine protease; similar to
                     factor VII precursor; synthesized in liver; similar to
                     Fugu rubripes FVII and FVIIB; contains 2 EGF-like domains;
                     member of peptidase family S1/trypsin family"
                     /codon_start=1
                     /product="coagulation factor VIIc precursor"
                     /protein_id="AAO33370.1"
                     /db_xref="GI:28194022"
                     /translation="MASFSRGTKRLFFIKLFIITVPVCSGFPEAGVFMEKPEANVFLH
                     RTRRANFLFEELKAGNLERECIEEKCSYEEAKEIFALPQQLEAFWRTYTAVDQCKLSP
                     CKNGATCTRRFETYACKCANGFHGHNCDKVRLTSNGCRYRNGGCEHFCREFPDRSYVC
                     FCAPGYRLDKDNSTCLPQVKVPCGRLQILFSPRVINGLICPKGHCPWQAMLSENNIYT
                     CGTIILSEQWVLTAAHCVWRKPAHLFNVTVGEHDREIFEKTEQHRRVIKVLIHPGYNK
                     TSSDKDLAMLKLHRPVKLGLYVVPICLPAQNSTISRTLANIRQSTVSGWGRLSRFGPP
                     ATILQRLTLPRVPLQECRLHTKLNITRNMLCAGLKTGGRDACEGDSGGPLVTYYEKTW
                     FLTGVVSWGKGCANENLYGVYVRVTNFLDWIGNIIATN"

  Query Match             0.8%;  Score 20.4;  DB 1;  Length 1293;
  Best Local Similarity   61.1%;  Pred. No. 1.1e+02;
  Matches   33;  Conservative    0;  Mismatches   21;  Indels    0;  Gaps    0;

Qy        365 CCCCTGGGTACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGG 418
              | ||||| ||||| |  | | | | |  |||    ||||||   || ||  |||
Db        488 CTCCTGGATACAGACTGGACAAGGACAACAGCACCTGCCTCCCTCAAGTTAAGG 541


RESULT 127
AF465269/c
LOCUS       AF465269                1416 bp    mRNA    linear   VRT 02-FEB-2003
DEFINITION  Gallus gallus coagulation factor IX precursor (F9) mRNA, complete
            cds.
ACCESSION   AF465269
VERSION     AF465269.1  GI:28194009
KEYWORDS    .
SOURCE      Gallus gallus (chicken)
  ORGANISM  Gallus gallus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Archosauria; Aves; Neognathae; Galliformes; Phasianidae;
            Phasianinae; Gallus.
REFERENCE   1  (bases 1 to 1416)
  AUTHORS   Davidson,C.J., Hirt,R.P., Lal,K., Snell,P., Elgar,G.,
            Tuddenham,E.G.D. and McVey,J.H.
  TITLE     Comparative sequence analysis and molecular evolution of blood
            coagulation genes from Gallus gallus and Fugu rubripes
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 1416)
  AUTHORS   McVey,J.H., Davidson,C.J., Lal,K., Snell,P. and Elgar,G.
  TITLE     Direct Submission
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  JOURNAL   Submitted (04-JAN-2002) Haemostasis Group, MRC Clinical Sciences
            Centre, The Faculty of Medicine, Imperial College, Hammersmith
            Campus, Du Cane Road, London W12 0NN, UK
FEATURES             Location/Qualifiers
     source          1. .1416
                     /organism="Gallus gallus"
                     /mol_type="mRNA"
                     /db_xref="taxon:9031"
     gene            1. .1416
                     /gene="F9"
     CDS             1. .1416
                     /gene="F9"
                     /EC_number="3.4.21.22"
                     /function="converts factor X to its active form in the
                     presence of Ca++ ions, phospholipids, and factor VIIa"
                     /note="vitamin K dependent serine protease; christmas
                     factor; contains 2 EGF-like domains; member of peptidase
                     family S1/trypsin family"
                     /codon_start=1
                     /product="coagulation factor IX precursor"
                     /protein_id="AAO33364.1"
                     /db_xref="GI:28194010"
                     /translation="MAKIPLILSFCLLEAFLGAESTVFIENKEASTVLSRTRRGNSNR
                     LEELIPGNLERECIEEKCSFEEAREVFENTEKTMEFWKIYIDGDQCNSNPCKNGAVCK
                     DGVSSYECMCPPGYGGRNCEIDSTCATKNGGCEHFCRHDTPQKAVCSCASGYKLHEDG
                     KSCKPAVPYPCGRITAPEMRGKVTRTENTIERWNITAHDEGDAHDEALDITEPPPPPT
                     TSAAPAKIVPITKNDTRVVGGYDSVKGQLPWQVHLVDSRGLGFCGGSIINEKWVVTAA
                     HCLEPGDNVTAVAGEYNTKEDDHTEQRRQVVKILPYPTYNRTRNKHHNDIALLELDQP
                     LTFNSYVTPICIGSRDFTNNLLSNGPGTVSGWGSMLYRGRSAIVLQVLTVPFVDRVTC
                     LKSTSTTILHSMFCAGYTAGGKDTCGGDSGGPYTNSIGETWFLTGVTSWGEECAKPGK
                     YGIYTKVAKYVKWIRETTRLT"

  Query Match             0.8%;  Score 20.4;  DB 1;  Length 1416;
  Best Local Similarity   53.8%;  Pred. No. 1.1e+02;
  Matches   42;  Conservative    0;  Mismatches   36;  Indels    0;  Gaps    0;

Qy        460 GGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTATCTCATACAGAGGATAGCACT 519
              | | ||  || | ||| |  | || |     ||||||| | ||  ||||    |  | ||
Db        408 GTGCTCGCAGCCCCCATTTTTCGTAGCACAAGTAGAGTCTATCTCACAGTTCCTGCCTCC 349

Qy        520 AGATGCTGTCTGGGACAT 537
              | ||  | |   || ||||
Db        348 ATAACCAGGTGGGCACAT 331


RESULT 128
AR112953
LOCUS       AR112953               1440 bp    DNA     linear   PAT 16-MAY-2001
DEFINITION  Sequence 13 from patent US 6132729.
ACCESSION   AR112953
VERSION     AR112953.1  GI:14093275
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 1440)
  AUTHORS   Thorpe,P.E., King,S.W. and Gao,B.
  TITLE     Combined tissue factor and chemotherapeutic methods and
            compositions for coagulation and tumor treatment
  JOURNAL   Patent: US 6132729-A 13 17-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .1440
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.8%;  Score 20.4;  DB 1;  Length 1440;
  Best Local Similarity   65.2%;  Pred. No. 1.1e+02;
  Matches   30;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy        374 ACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGGC 419
              ||||||| || ||   || |||||||| | || |      |||||
Db          4 ACAGGCAGGGGCAGCACTGCAGAGATTTCATCATGGTCTCCCAGGC 49


RESULT 129
AR112969
LOCUS       AR112969               1440 bp    DNA     linear   PAT 16-MAY-2001
DEFINITION  Sequence 13 from patent US 6132730.
ACCESSION   AR112969
VERSION     AR112969.1  GI:14093291
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 1440)
  AUTHORS   Thorpe,P.E., King,S.W. and Gao,B.
  TITLE     Combined tissue factor and factor VIIa methods and compositions for
            coagulation and tumor treatment
  JOURNAL   Patent: US 6132730-A 13 17-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .1440
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.8%;  Score 20.4;  DB 1;  Length 1440;
  Best Local Similarity   65.2%;  Pred. No. 1.1e+02;
  Matches   30;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy        374 ACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGGC 419
              ||||||| || ||   || |||||||| | || |      |||||
Db          4 ACAGGCAGGGGCAGCACTGCAGAGATTTCATCATGGTCTCCCAGGC 49


RESULT 130
I19358
LOCUS       I19358                 1440 bp    DNA     linear   PAT 07-OCT-1996
DEFINITION  Sequence 3 from patent US 5504064.
ACCESSION   I19358
VERSION     I19358.1  GI:1599713
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 1440)
  AUTHORS   Morrissey,J.H. and Comp,P.C.
  TITLE     Treatment of bleeding with modified tissue factor in combination
            with an activator of FVII
  JOURNAL   Patent: US 5504064-A 3 02-APR-1996;
FEATURES             Location/Qualifiers
     source          1. .1440
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.8%;  Score 20.4;  DB 1;  Length 1440;
  Best Local Similarity   65.2%;  Pred. No. 1.1e+02;
  Matches   30;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy        374 ACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGGC 419
              ||||||| || ||   || |||||||| | || |      |||||
Db          4 ACAGGCAGGGGCAGCACTGCAGAGATTTCATCATGGTCTCCCAGGC 49


RESULT 131
I19360
LOCUS       I19360                 1440 bp    DNA     linear   PAT 07-OCT-1996
DEFINITION  Sequence 3 from patent US 5504067.
ACCESSION   I19360
VERSION     I19360.1  GI:1599715
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 1440)
  AUTHORS   Morrissey,J.H. and Comp,P.C.
  TITLE     Treatment of bleeding with modified tissue factor in combination
            with FVII
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  JOURNAL   Patent: US 5504067-A 3 02-APR-1996;
FEATURES             Location/Qualifiers
     source          1. .1440
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.8%;  Score 20.4;  DB 1;  Length 1440;
  Best Local Similarity   65.2%;  Pred. No. 1.1e+02;
  Matches   30;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy        374 ACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGGC 419
              ||||||| || ||   || |||||||| | || |      |||||
Db          4 ACAGGCAGGGGCAGCACTGCAGAGATTTCATCATGGTCTCCCAGGC 49


RESULT 132
BD194674
LOCUS       BD194674               1440 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Tissue factor methods and compositions for coagulation and tumor
            treatment.
ACCESSION   BD194674
VERSION     BD194674.1  GI:33004420
KEYWORDS    JP 2002514201-A/3.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 1440)
  AUTHORS   Thorpe,P.E., King,S.W. and Gao,B.
  TITLE     Tissue factor methods and compositions for coagulation and tumor
            treatment
  JOURNAL   Patent: JP 2002514201-A 3 14-MAY-2002;
            BOARD OF REGENTS THE UNIVERSITY OF TEXAS SYSTEM
COMMENT     OS   Mammalian
            PN   JP 2002514201-A/3
            PD   14-MAY-2002
            PF   20-JAN-1998 JP 1998534630
            PR   22-JAN-1997 US    60/035920,27-JAN-1997 US    60/036205 PR
            27-MAR-1997 US    60/042427
            PI   PHILIP E THORPE,STEVEN W KING,BONING GAO
            PC   A61K47/48
            CC   Tissue factor methods and compositions for coagulation and  CC
                 tumor treatment
            FH   Key             Location/Qualifiers
            FT   source          1. .1440
            FT                   /organism='Mammalian'.
FEATURES             Location/Qualifiers
     source          1. .1440
                     /organism="unidentified"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32644"

  Query Match             0.8%;  Score 20.4;  DB 1;  Length 1440;
  Best Local Similarity   65.2%;  Pred. No. 1.1e+02;
  Matches   30;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy        374 ACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGGC 419
              ||||||| || ||   || |||||||| | || |      |||||
Db          4 ACAGGCAGGGGCAGCACTGCAGAGATTTCATCATGGTCTCCCAGGC 49


RESULT 133
AF272774/c
LOCUS       AF272774               2072 bp    mRNA    linear   PRI 07-FEB-2003
DEFINITION  Homo sapiens factor VII active site mutant immunoconjugate mRNA,
            complete cds.
ACCESSION   AF272774
VERSION     AF272774.2  GI:28269793
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 2072)
  AUTHORS   Hu,Z. and Garen,A.
  TITLE     Targeting tissue factor on tumor vascular endothelial cells and
            tumor cells for immunotherapy in mouse models of prostatic cancer
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 98 (21), 12180-12185 (2001)
  MEDLINE   21477448
   PUBMED   11593034
REFERENCE   2  (bases 1 to 2072)
  AUTHORS   Hu,Z. and Garen,A.
  TITLE     Direct Submission
  JOURNAL   Submitted (26-MAY-2000) Department of Molecular Biophysics and
            Biochemistry, Yale University, 266 Whitney Ave., New Haven, CT
            06520, USA
REFERENCE   3  (bases 1 to 2072)
  AUTHORS   Hu,Z. and Garen,A.
  TITLE     Direct Submission
  JOURNAL   Submitted (07-FEB-2003) Department of Molecular Biophysics and
            Biochemistry, Yale University, 266 Whitney Ave., New Haven, CT
            06520, USA
  REMARK    Sequence update by submitter
COMMENT     On Feb 7, 2003 this sequence version replaced gi:14279677.
FEATURES             Location/Qualifiers
     source          1. .2072
                     /organism="Homo sapiens"
                     /mol_type="mRNA"
                     /db_xref="taxon:9606"
     CDS             22. .2061
                     /note="hfVIIasm"
                     /codon_start=1
                     /product="factor VII active site mutant immunoconjugate"
                     /protein_id="AAK58686.2"
                     /db_xref="GI:28269794"
                     /translation="MVSQALRLLCLLLGLQGCLAAVFVTQEEAHGVLHRRRRANAFLE
                     ELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGSCKDQ
                     LQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSLLA
                     DGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG
                     TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGT
                     TNHDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALE
                     LMVLNVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCAGDSGGPHATHYRG
                     TWYLTGIVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFPGSAEPK
                     SCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFN
                     WYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEK
                     TISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYK
                     TTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK"

  Query Match             0.8%;  Score 20.4;  DB 1;  Length 2072;
  Best Local Similarity   61.1%;  Pred. No. 1.1e+02;
  Matches   33;  Conservative    0;  Mismatches   21;  Indels    0;  Gaps    0;

Qy        881 TTGTCTTTTATCTGTCGAGACTTGCTTTGTTTTGAAATATGTATTCAATTTTGG 934
              || |||  | | || ||| | | | | |||  | ||   ||||||| | |||
Db        574 TGGCATTTCTTTTTTCTAGAATAGGTATTTTTCCACATGGATATTCAACTGTGG 521


RESULT 134
AF272773/c
LOCUS       AF272773               2078 bp    mRNA    linear   SYN 17-AUG-2000
DEFINITION  Synthetic construct mutated mouse factor VII molecule
            immunoconjugate mRNA, complete cds.
ACCESSION   AF272773
VERSION     AF272773.1  GI:9837149
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 2078)
  AUTHORS   Hu,Z., Sun,Y. and Garen,A.
  TITLE     Targeting tumor vasculature endothelial cells and tumor cells for
            immunotherapy of human melanoma in a mouse xenograft model
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 96 (14), 8161-8166 (1999)
  MEDLINE   99324206
   PUBMED   10393965
REFERENCE   2  (bases 1 to 2078)
  AUTHORS   Hu,Z. and Garen,A.
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  TITLE     Intratumoral injection of adenoviral vectors encoding
            tumor-targeted immunoconjugates for cancer immunotherapy
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 97 (16), 9221-9225 (2000)
  MEDLINE   20381364
   PUBMED   10922073
REFERENCE   3  (bases 1 to 2078)
  AUTHORS   Hu,Z. and Garen,A.
  TITLE     Direct Submission
  JOURNAL   Submitted (26-MAY-2000) Molecular Biophysics and Biochemistry, Yale
            University, 266 Whitney Ave, New Haven, CT 06520, USA
FEATURES             Location/Qualifiers
     source          1. .2078
                     /organism="synthetic construct"
                     /mol_type="mRNA"
                     /db_xref="taxon:32630"
     CDS             22. .2067
                     /note="mfVIIasm; contains active site mutation"
                     /codon_start=1
                     /transl_table=11
                     /product="mutated mouse factor VII molecule
                     immunoconjugate"
                     /protein_id="AAG00449.1"
                     /db_xref="GI:9837150"
                     /translation="MVPQAHGLLLLCFLLQLQGPLGTAVFITQEEAHGVLHRQRRANS
                     LLEELWPGSLERECNEEQCSFEEAREIFKSPERTKQFWIVYSDGDQCASNPCQNVGTC
                     QDHLKSYVCFCLLDFEGRNCEKSKNEQLICANENGDCDQYCRDHVGTKRTCSCHEDYT
                     LQPDEVSCKPKVEYPCGRIPVVEKRNSSSRQGRIVGGNVCPKGECPWQAVLKINGLLL
                     CGAVLLDARWIVTAAHCFDNIRYWGNITVVMGEHDFSEKDGDEQVRRVTQVIMPDKYI
                     RGKINHDIALLRLHRPVTFTDYVVPLCLPEKSFSENTLARIRFSRVSGWGQLLDRGAT
                     ALELMSIEVPRLMTQDCLEHAKHSSNTPKITENMFCAGYMDGTKDACAGDSGGPHATH
                     YHGTWYLTGVVSWGEGCAAIGHIGVYTRVSQYIDWLVRHMDSKLQVGVFRLPLLGSAE
                     PKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVK
                     FNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPI
                     EKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENN
                     YKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK"

  Query Match             0.8%;  Score 20.4;  DB 1;  Length 2078;
  Best Local Similarity   58.1%;  Pred. No. 1.1e+02;
  Matches   36;  Conservative    0;  Mismatches   26;  Indels    0;  Gaps    0;

Qy        467 GAGGCTCCAATGGTTGTTGATGTGGTAGAGTATCTCATACAGAGGATAGCACTAGATGCT 526
              |||||||   ||  ||| |  || ||  ||   ||||| ||      ||||  ||| |
Db       2046 GAGGCTCTTCTGCGTGTAGTGGTTGTGCAGAGCCTCATGCATCACGGAGCATGAGAAGAC 1987

Qy        527 GT 528
              ||
Db       1986 GT 1985


RESULT 135
AR095304
LOCUS       AR095304               2462 bp    DNA     linear   PAT 08-SEP-2000
DEFINITION  Sequence 25 from patent US 6004555.
ACCESSION   AR095304
VERSION     AR095304.1  GI:10023060
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 2462)
  AUTHORS   Thorpe,P.E. and Edgington,T.S.
  TITLE     Methods for the specific coagulation of vasculature
  JOURNAL   Patent: US 6004555-A 25 21-DEC-1999;
FEATURES             Location/Qualifiers
     source          1. .2462
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.8%;  Score 20.4;  DB 1;  Length 2462;
  Best Local Similarity   65.2%;  Pred. No. 1.1e+02;
  Matches   30;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy        374 ACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGGC 419
              ||||||| || ||   || |||||||| | || |       |||||
Db          4 ACAGGCAGGGGCAGCACTGCAGAGATTTCATCATGGTCTCCCAGGC 49


RESULT 136
AR103988
LOCUS       AR103988               2462 bp    DNA     linear   PAT 14-FEB-2001
DEFINITION  Sequence 25 from patent US 6093399.
ACCESSION   AR103988
VERSION     AR103988.1  GI:12816696
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 2462)
  AUTHORS   Thorpe,P.E. and Edgington,T.S.
  TITLE     Methods and compositions for the specific coagulation of
            vasculature
  JOURNAL   Patent: US 6093399-A 25 25-JUL-2000;
FEATURES             Location/Qualifiers
     source          1. .2462
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.8%;  Score 20.4;  DB 1;  Length 2462;
  Best Local Similarity   65.2%;  Pred. No. 1.1e+02;
  Matches   30;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy        374 ACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGGC 419
              ||||||| || ||   || |||||||| | || |       |||||
Db          4 ACAGGCAGGGGCAGCACTGCAGAGATTTCATCATGGTCTCCCAGGC 49


RESULT 137
AX335083
LOCUS       AX335083               2462 bp    DNA     linear   PAT 09-JAN-2002
DEFINITION  Sequence 5592 from Patent WO0194629.
ACCESSION   AX335083
VERSION     AX335083.1  GI:18125802
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Young,P.E., Augustus,M., Carter,K.C., Ebner,R., Endress,G.,
            Horrigan,S., Soppet,D.R. and Weaver,Z.
  TITLE     Cancer gene determination and therapeutic screening using signature
            gene sets
  JOURNAL   Patent: WO 0194629-A 5592 13-DEC-2001;
            Avalon Pharmaceuticals (US)
FEATURES             Location/Qualifiers
     source          1. .2462
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.8%;  Score 20.4;  DB 1;  Length 2462;
  Best Local Similarity   65.2%;  Pred. No. 1.1e+02;
  Matches   30;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy        374 ACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGGC 419
              ||||||| || ||   || |||||||| | || |       |||||
Db          4 ACAGGCAGGGGCAGCACTGCAGAGATTTCATCATGGTCTCCCAGGC 49


RESULT 138
AX409604
LOCUS       AX409604               2462 bp    DNA     linear   PAT 14-JUN-2002
DEFINITION  Sequence 2251 from Patent WO0229103.
ACCESSION   AX409604
VERSION     AX409604.1  GI:21442309
KEYWORDS    .
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SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Alvares,C., Horne,D., Peres-da-Silva,S. and Vockley,J.G.
  TITLE     Gene expression profiles in liver cancer
  JOURNAL   Patent: WO 0229103-A 2251 11-APR-2002;
            GENE LOGIC INC (US)
FEATURES             Location/Qualifiers
     source          1. .2462
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"
                     /note="EMBL/GenBank Accession No. M13232"

  Query Match             0.8%;  Score 20.4;  DB 1;  Length 2462;
  Best Local Similarity   65.2%;  Pred. No. 1.1e+02;
  Matches   30;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy        374 ACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGGC 419
              ||||||| || ||   || |||||||| | || |       |||||
Db          4 ACAGGCAGGGGCAGCACTGCAGAGATTTCATCATGGTCTCCCAGGC 49


RESULT 139
HUMFVII
LOCUS       HUMFVII                 2462 bp    mRNA    linear   PRI 13-FEB-1996
DEFINITION  Human factor VII serine protease precursor mRNA, complete cds,
            clone lambda-HVII2463.
ACCESSION   M13232
VERSION     M13232.1  GI:182799
KEYWORDS    factor VII; serine protease; serum glycoprotein.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 2462)
  AUTHORS   Hagen,F.S., Gray,C.L., O'Hara,P.J., Grant,F.J., Saari,G.C.,
            Woodbury,R.G., Hart,C.E., Insley,M., Kisiel,W., Kurachi,K. and
            Davie,E.W.
  TITLE     Characterization of a cDNA coding for human factor VII
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 83 (8), 2412-2416 (1986)
  MEDLINE   86205965
   PUBMED   3486420
COMMENT     Original source text: Homo sapiens liver cDNA to mRNA.
            Draft entry and sequence in computer-readable form for [1] kindly
            provided by F.S.Hagen.
            [1] sequenced two alternatively spliced mRNAs that produced
            shortened signal peptides.  One is presented as factor VIIb below.
FEATURES             Location/Qualifiers
     source          1. .2462
                     /organism="Homo sapiens"
                     /mol_type="mRNA"
                     /db_xref="taxon:9606"
                     /tissue_type="liver"
     mRNA            <1. .2462
                     /product="FVIIa mRNA"
     CDS             36. .1436
                     /note="precursor for factor VIIa and b"
                     /codon_start=1
                     /product="coagulation factor VII"
                     /protein_id="AAA88040.1"
                     /db_xref="GI:182801"
                     /translation="MVSQALRLLCLLLGLQGCLAAGGVAKASGGETRDMPWKPGPHRV
                     FVTQEEAHGVLHRRRRANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWI
                     SYSDGDQCASSPCQNGGSCKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQ
                     YCSDHTGTKRSCRCHEGYSLLADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKV
                     CPKGECPWQVLLLVNGAQLCGGTLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEH
                     DGDEQSRRVAQVIIPSTYVPGTTNHDIALLRLHQPVVLTDHVVPLCLPERTFSERTLA
                     FVRFSLVSGWGQLLDRGATALELMVLNVPRLMTQDCLQQSRKVGDSPNITEYMFCAGY
                     SDGSKDSCKGDSGGPHATHYRGTWYLTGIVSWGQGCATVGHFGVYTRVSQYIEWLQKL
                     MRSEPRPGVLLRAPFP"
     sig_peptide     36. .215
                     /note="factor VIIa signal peptide"
     CDS             join(36. .99,166. .1436)
                     /note="preprofactor VIIb"
                     /codon_start=1
                     /protein_id="AAA88041.1"
                     /db_xref="GI:182800"
                     /translation="MVSQALRLLCLLLGLQGCLAAVFVTQEEAHGVLHRRRRANAFLE
                     ELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGSCKDQ
                     LQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSLLA
                     DGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG
                     TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGT
                     TNHDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALE
                     LMVLNVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCKGDSGGPHATHYRG
                     TWYLTGIVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFP"
     sig_peptide     join(36. .99,166. .215)
                     /note="factor VIIb signal peptide"
     mat_peptide     216. .671
                     /product="coagulation factor VII"
                     /note="light chain"
     mat_peptide     672. .1433
                     /product="coagulation factor VII"
                     /note="heavy chain"
     exon            <36. .99
                     /note="preprofactor VIIb"
                     /number=1
     exon            100. .165
                     /note="alternate exon; putative"
     exon            166. .2462
                     /note="factor VIIb"
                     /number=2

  Query Match             0.8%;  Score 20.4;  DB 1;  Length 2462;
  Best Local Similarity   65.2%;  Pred. No. 1.1e+02;
  Matches   30;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy        374 ACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGGC 419
              ||||||| || ||   || |||||||| | || |       |||||
Db          4 ACAGGCAGGGGCAGCACTGCAGAGATTTCATCATGGTCTCCCAGGC 49


RESULT 140
E01076
LOCUS       E01076                  2483 bp    RNA     linear   PAT 29-SEP-1997
DEFINITION  cDNA sequence of Factor VII fragment.
ACCESSION   E01076
VERSION     E01076.1  GI:2169335
KEYWORDS    JP 1987000283-A/2.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 2483)
  AUTHORS   Furederitsuku,E.H., Maaku,J.M., Shiyaaron,J.B., Kiyasuriin,E.B.,
            Maagaretsuto,W.I., Richiyaado,J.U. and Chiyaaruzu,E.G.
  TITLE     DNA ENCODING FACTOR VII
  JOURNAL   Patent: JP 1987000283-A 2 06-JAN-1987;
            HEMOJIENETEITSUKUSU INC NIPPON SODA CO LTD, NISSAN CHEM IND LTD,
            TOYO SODA MFG CO LTD
COMMENT     PN   JP 1987000283-A/2
            PD   06-JAN-1987
            PF   16-APR-1986 JP 1986087861
            PR   17-APR-1985 US 85    724311, 16-DEC-1985 US 85    810002 PI
            FUREDERITSUKU ESU HAAGEN, MAAKU JIEI MARII,
            PI   SHIYAARON JIEI BAZUBII,
            PI   KIYASURIIN ERU BAAKUNAA, MAAGARETSUTO WAI INSUREE, PI
            RICHIYAADO JII UTSUDOBERII, CHIYAARUZU ERU GUREI PC
            C12N15/00,A61K37/465,C12N5/00,C12N9/50,(C12N9/50,C12R1:91); CC
            strandedness: Double;
            CC   topology: Linear;
            CC   hypothetical: No;
            CC   anti-sense: No;
            CC   *source: library=cDNA library;
            CC   *source: clone=lambdaVII 2463;
```

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           FH   Key             Location/Qualifiers
           FH
           FT   5'UTR           1. .35
           FT   sig_peptide     36. .215
           FT   CDS             216. .1436
           FT                   /product='factor VII'
           FT   3'UTR           1437. .2462
           FT   misc_recomb     2462. .<2480
           FT                   /note='polyA tail'.
FEATURES             Location/Qualifiers
     source          1. .2483
                     /organism="unidentified"
                     /mol_type="genomic RNA"
                     /db_xref="taxon:32644"

  Query Match             0.8%;  Score 20.4;  DB 1;  Length 2483;
  Best Local Similarity   65.2%;  Pred. No. 1.1e+02;
  Matches   30;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy        374 ACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGGC 419
              ||||||| || ||   || |||||||| | || |       |||||
Db          4 ACAGGCAGGGGCAGCACTGCAGAGATTTCATCATGGTCTCCCAGGC 49


RESULT 141
I07990
LOCUS       I07990                2483 bp    DNA     linear   PAT 02-DEC-1994
DEFINITION  Sequence 3 from Patent EP 0200421.
ACCESSION   I07990
VERSION     I07990.1  GI:589296
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 2483)
  AUTHORS   Hagen,F.S., Murray,M.J., Busby,S.J., Berkner,K.L., Insley,M.Y.,
            Woodbury,R.G. and Gray,C.L.
  TITLE     Expression of factor VII and IX activities in mammalian cells
  JOURNAL   Patent: EP 0200421-A2 3 10-DEC-1986;
FEATURES             Location/Qualifiers
     source          1. .2483
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.8%;  Score 20.4;  DB 1;  Length 2483;
  Best Local Similarity   65.2%;  Pred. No. 1.1e+02;
  Matches   30;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy        374 ACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGGC 419
              ||||||| || ||   || |||||||| | || |       |||||
Db          4 ACAGGCAGGGGCAGCACTGCAGAGATTTCATCATGGTCTCCCAGGC 49


RESULT 142
AY155152/c
LOCUS       AY155152                183 bp    DNA     linear   INV 16-MAR-2003
DEFINITION  Drosophila straubae isolate 5 mastermind (mast) gene, partial cds.
ACCESSION   AY155152
VERSION     AY155152.1  GI:28975316
KEYWORDS    .
SOURCE      Drosophila straubae
  ORGANISM  Drosophila straubae
            Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
            Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
            Ephydroidea; Drosophilidae; Drosophila; mayaguana subcluster.
REFERENCE   1  (bases 1 to 183)
  AUTHORS   O'Grady,P.M. II, Durando,C.M., Heed,W.B., Wasserman,M., Etges,W.
            and DeSalle,R.
  TITLE     Genetic divergence within the Drosophila mayaguana subcluster, a
            closely related triad of Caribbean species in the repleta species
            group
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 183)
  AUTHORS   O'Grady,P.M. II, Durando,C.M., Heed,W.B., Wasserman,M., Etges,W.
            and DeSalle,R.
  TITLE     Direct Submission
  JOURNAL   Submitted (25-SEP-2002) Invertebrate Zoology, American Museum of
            Natural History, Central Park West at 79th Street, New York, NY
            10024, USA
FEATURES             Location/Qualifiers
     source          1. .183
                     /organism="Drosophila straubae"
                     /mol_type="genomic DNA"
                     /isolate="5"
                     /db_xref="taxon:214823"
                     /clone="12"
                     /country="Navassa Island"
     gene            <1. .>183
                     /gene="mast"
     mRNA            <1. .>183
                     /gene="mast"
                     /product="mastermind"
     CDS             <1. .>183
                     /gene="mast"
                     /codon_start=3
                     /product="mastermind"
                     /protein_id="AAO61936.1"
                     /db_xref="GI:28975317"
                     /translation="DLKRLQQQQAMQQQQQQHHAQQQQQQHPNGPKMGVPMGGAGNFA
                     KQQQQQQVVTXXQQQQ"

  Query Match             0.7%;  Score 20.2;  DB 1;  Length 183;
  Best Local Similarity   53.1%;  Pred. No. 1e+02;
  Matches   43;  Conservative    0;  Mismatches   38;  Indels    0;  Gaps    0;

Qy        780 TGGTTTCCATAAGTTTGTAAGTTTTCTGTTGTTTCTGTTGTTGTTGTTGTTATCTAGATT 839
              ||| | |    | ||||  |   ||  | ||||  || ||||| || |||         ||
Db        111 TGGGTACACCCATTTTGGGACCATTGGGATGTTGTTGCTGTTGCTGCTGTGCATGGTGTT 52

Qy        840 TAAGCTGTGGTGGTCAGATAG 860
              ||||| |  ||   || |
Db         51 GTTGCTGTTGCTGTTGCATTG 31


RESULT 143
AB083386/c
LOCUS       AB083386                214 bp    DNA     linear   PRI 07-JAN-2003
DEFINITION  Homo sapiens PROS1 gene for Protein S, partial cds,
            isolate:patient: PS 1.
ACCESSION   AB083386
VERSION     AB083386.1  GI:27531049
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Hamasaki,N., Dong Chon,K., Kinosita,S., Iida,H., Inoue,S.,
            Watanabe,K., Kurihara,M., Wada,Y. and Ono,M.
  TITLE     Gene analysis of anticogulation factors in Japanese thrombotic
            patients. Genetic background of thrombophilia in Japan
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 214)
  AUTHORS   Hamasaki,N.
  TITLE     Direct Submission
  JOURNAL   Submitted (10-APR-2002) Naotaka Hamasaki, Kyushu University
            Hospital, Department of clinical chemistry and laboratory medicine;
            3-1-1 maidashi, Higashi-ku Fukuokasi, Fukuoka 812-8582, Japan
            (E-mail:hamasaki@cclm.med.kyushu-u.ac.jp, Tel:81-92-642-5770,
            Fax:81-92-642-5772)
FEATURES             Location/Qualifiers
     source          1. .214
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /isolate="patient: PS 1"
                     /db_xref="taxon:9606"
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     variation       24
                     /replace="g"
     gene            25. .182
                     /gene="PROS1"
     CDS             <25. .>182
                     /gene="PROS1"
                     /codon_start=3
                     /product="Protein S"
                     /protein_id="BAC54134.1"
                     /db_xref="GI:27531050"
                     /translation="LSKQQASQVLVRKRRANSLLEETKQGNLERECIEELCNKEEARE
                     VFENDPET"
     exon            25. .182
                     /gene="PROS1"
                     /number=2

  Query Match              0.7%;  Score 20.2;  DB 1;  Length 214;
  Best Local Similarity   51.7%;  Pred. No. 1.1e+02;
  Matches   46;  Conservative    0;  Mismatches   43;  Indels    0;  Gaps    0;

Qy        726 CTTCTATTTCTTGATTTCTATCTTGGCTCATTTTTAACTCAGTAGTGAGTTGTTTGGTTT 785
              |||||  ||  |         |||| | |   || |   |||  | |    ||||||||||
Db        150 CTTCTTCTTTATTGCACAGTTCTTCGATGCATTCTCTTTCAAGATTACCCTGTTTGGTTT 91

Qy        786 CCATAAGTTTGTAAGTTTTCTGTTGTTTC 814
              |   ||||    || ||    |  | |||
Db         90 CTTCAAGTAAAGAATTTGCACGACGCTTC 62


RESULT 144
AB084901/c
LOCUS       AB084901                 214 bp    DNA     linear   PRI 07-JAN-2003
DEFINITION  Homo sapiens PROS1 gene for PS22, partial cds.
ACCESSION   AB084901
VERSION     AB084901.1  GI:27531280
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Hamasaki,N., Kang,D., Kinoshita,S., Iida,H., Inoue,S., Watanabe,K.,
            Kurihara,M., Wada,Y. and Ono,M.
  TITLE     Gene analysis of anticoagulation factors in Japanese thrombotic
            patients.Genetic background of thrombophilia in Japan
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 214)
  AUTHORS   Hamasaki,N. and Inoue,S.
  TITLE     Direct Submission
  JOURNAL   Submitted (09-MAY-2002) Naotaka Hamasaki, Kyushu University
            Hospital, Department of clinical chemistry and laboratory medicine;
            3-1-1 maidasi, Higasi-ku Fukuokasi, Fukuoka 812-8582, Japan
            (E-mail:hamasaki@cclm.med.kyushu-u.ac.jp, Tel:81-92-642-5770,
            Fax:81-92-642-5772)
FEATURES             Location/Qualifiers
     source          1. .214
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /isolate="16"
                     /db_xref="taxon:9606"
     gene            25. .182
                     /gene="PROS1"
     CDS             <25. .>182
                     /gene="PROS1"
                     /codon_start=3
                     /product="PS22"
                     /protein_id="BAC54254.1"
                     /db_xref="GI:27531281"
                     /translation="LSKQQASQVLVRKRRANSLLEETKQGNLERECIEELCNKEEARE
                     VFENDPEM"
     exon            25. .182
                     /gene="PROS1"
                     /number=2
     variation       181
                     /gene="PROS1"
                     /replace="c"

  Query Match              0.7%;  Score 20.2;  DB 1;  Length 214;
  Best Local Similarity   51.7%;  Pred. No. 1.1e+02;
  Matches   46;  Conservative    0;  Mismatches   43;  Indels    0;  Gaps    0;

Qy        726 CTTCTATTTCTTGATTTCTATCTTGGCTCATTTTTAACTCAGTAGTGAGTTGTTTGGTTT 785
              |||||  ||  |         |||| | |   || |   |||  | |    ||||||||||
Db        150 CTTCTTCTTTATTGCACAGTTCTTCGATGCATTCTCTTTCAAGATTACCCTGTTTGGTTT 91

Qy        786 CCATAAGTTTGTAAGTTTTCTGTTGTTTC 814
              |   ||||    || ||    |  | |||
Db         90 CTTCAAGTAAAGAATTTGCACGACGCTTC 62


RESULT 145
AY022473/c
LOCUS       AY022473                 227 bp    DNA     linear   PLN 07-FEB-2001
DEFINITION  Oryza sativa microsatellite MRG4798 containing (AGC)X9, closest to
            marker G132, genomic sequence.
ACCESSION   AY022473
VERSION     AY022473.1  GI:12705689
KEYWORDS    .
SOURCE      Oryza sativa
  ORGANISM  Oryza sativa
            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
            Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
            Ehrhartoideae; Oryzeae; Oryza.
REFERENCE   1  (bases 1 to 227)
  AUTHORS   Tao,N., Barbazuk,W.B., Liu,J., Wu,K. and Barry,G.F.
  TITLE     Simple sequence repeats from Monsanto rice genomic sequences
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 227)
  AUTHORS   Tao,N., Barbazuk,W.B., Liu,J., Wu,K. and Barry,G.F.
  TITLE     Direct Submission
  JOURNAL   Submitted (10-JAN-2001) Genomics, Monsanto, 800 North Lindbergh
            Blvd., Creve Coeur, MO 63167, USA
COMMENT     Derived from rice genomic sequences generated from the Monsanto
            Rice Genome Sequencing project. Please see
            http://www.rice-research.org for more information.  The sequence
            data were produced primarily in the laboratories of Dr. Leroy Hood
            at the University of Washington in Seattle.
FEATURES             Location/Qualifiers
     source          1. .227
                     /organism="Oryza sativa"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:4530"
     repeat_region   1. .227
                     /note="microsatellite MRG4798"
                     /rpt_type=tandem
                     /rpt_unit="agc"

  Query Match              0.7%;  Score 20.2;  DB 1;  Length 227;
  Best Local Similarity   63.3%;  Pred. No. 1.1e+02;
  Matches   31;  Conservative    0;  Mismatches   18;  Indels    0;  Gaps    0;

Qy        576 TGAAGCCTCTGCTGGCAATACTTCTGGGGCTGCTGCCTTTCTCCCTGTC 624
              ||  ||  ||||||    | || ||  ||||||||   |||||  |||
Db        125 TGCTGCTGCTGCTGCTGCTGCTACTGCTGCTGCTGCTCTCCTCGTC 77


RESULT 146
AY023221
LOCUS       AY023221                 227 bp    DNA     linear   PLN 07-FEB-2001
DEFINITION  Oryza sativa microsatellite MRG5546 containing (GCT)X9, closest to
            marker G132, genomic sequence.
ACCESSION   AY023221
VERSION     AY023221.1  GI:12706437
KEYWORDS    .
SOURCE      Oryza sativa
  ORGANISM  Oryza sativa
```

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            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
            Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
            Ehrhartoideae; Oryzeae; Oryza.
REFERENCE   1  (bases 1 to 227)
  AUTHORS   Tao,N., Barbazuk,W.B., Liu,J., Wu,K. and Barry,G.F.
  TITLE     Simple sequence repeats from Monsanto rice genomic sequences
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 227)
  AUTHORS   Tao,N., Barbazuk,W.B., Liu,J., Wu,K. and Barry,G.F.
  TITLE     Direct Submission
  JOURNAL   Submitted (10-JAN-2001) Genomics, Monsanto, 800 North Lindbergh
            Blvd., Creve Coeur, MO 63167, USA
COMMENT     Derived from rice genomic sequences generated from the Monsanto
            Rice Genome Sequencing project. Please see
            http://www.rice-research.org for more information.  The sequence
            data were produced primarily in the laboratories of Dr. Leroy Hood
            at the University of Washington in Seattle.
FEATURES             Location/Qualifiers
     source          1. .227
                     /organism="Oryza sativa"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:4530"
     repeat_region   1. .227
                     /note="microsatellite MRG5546"
                     /rpt_type=tandem
                     /rpt_unit="gct"

  Query Match             0.7%;  Score 20.2;  DB 1;  Length 227;
  Best Local Similarity   63.3%;  Pred. No. 1.1e+02;
  Matches   31;  Conservative    0;  Mismatches   18;  Indels    0;  Gaps    0;

Qy        576 TGAAGCCTCTGCTGGCAATACTTCTGGGGCTGCTGCCTTTCTCCCTGTC 624
              ||  ||  ||||||    | || ||   ||||||||  |||||  |||
Db        103 TGCTGCTGCTGCTGCTGCTGCTACTGCTGCTGCTGCTCTCCTCGTC 151


RESULT 147
AX098472
LOCUS       AX098472                271 bp    DNA     linear   PAT 02-APR-2001
DEFINITION  Sequence 9 from Patent WO0120029.
ACCESSION   AX098472
VERSION     AX098472.1  GI:13537758
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Tocque,B., Bracco,L. and Schweighoffer,F.
  TITLE     Genetic markers of toxicity, preparation and uses thereof
  JOURNAL   Patent: WO 0120029-A 9 22-MAR-2001;
            Exonhit Therapeutics S.A. (FR)
FEATURES             Location/Qualifiers
     source          1. .271
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"
     mRNA            6. .266
                     /note="Identity to human spliceosomal protein SAP62 mRNA
                     cds, nucleotides 468-730. GenBank Acc: L21990."

  Query Match             0.7%;  Score 20.2;  DB 1;  Length 271;
  Best Local Similarity   54.8%;  Pred. No. 1.1e+02;
  Matches   40;  Conservative    0;  Mismatches   33;  Indels    0;  Gaps    0;

Qy        358 GGTCAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGCAG 417
              | ||  ||  || || ||    | ||| ||||   |  ||    |  |  ||| | ||||
Db        170 GATCTCTCTGCTCGGCACCTTGAAGGCAATGGTCTCGTAGGGCTCAGCGGCCATGAGCAG 229

Qy        418 GCAGGGCCATGGC 430
              | |  ||||  ||
Db        230 GTACTGCCAGCGC 242
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RESULT 148
HUMPROS01/c
LOCUS       HUMPROS01               272 bp    DNA     linear   PRI 17-JUL-2000
DEFINITION  Homo sapiens protein S alpha (PROS1) gene, exon 2.
ACCESSION   M36551 J02918
VERSION     M36551.1  GI:190427
KEYWORDS    .
SEGMENT     1 of 14
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 272)
  AUTHORS   Ploos van Amstel,H.K., Reitsma,P.H., van der Logt,C.P. and
            Bertina,R.M.
  TITLE     Intron-exon organization of the active human protein S gene PS
            alpha and its pseudogene PS beta: duplication and silencing during
            primate evolution
  JOURNAL   Biochemistry 29 (34), 7853-7861 (1990)
  MEDLINE   91084445
   PUBMED   2148111
COMMENT     Original source text: Human DNA.
            Draft entry and computer-readable sequence for [Biochemistry 29,
            7853-4861 (1990)] kindly submitted
            by H.K.Ploos van Amstel, 13-JUL-1990.
FEATURES             Location/Qualifiers
     source          1. .272
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"
                     /chromosome="3"
                     /map="3p11-q11.2"
     exon            28. .185
                     /gene="PROS1"
                     /note="protein S alpha; G00-120-721; putative"
                     /number=2

  Query Match             0.7%;  Score 20.2;  DB 1;  Length 272;
  Best Local Similarity   51.7%;  Pred. No. 1.1e+02;
  Matches   46;  Conservative    0;  Mismatches   43;  Indels    0;  Gaps    0;

Qy        726 CTTCTATTTCTTGATTTCTATCTTGGCTCATTTTTAACTCAGTAGTGAGTTGTTTGGTTT 785
              |||||  ||  |         |||| | |   || |   |||  | |    ||||||||||
Db        153 CTTCTTCTTTATTGCACAGTTCTTCGATGCATTCTCTTTCAAGATTACCCTGTTTGGTTT 94

Qy        786 CCATAAGTTTGTAAGTTTTCTGTTGTTTC 814
              |  ||||    || ||   |  | |||
Db         93 CTTCAAGTAAAGAATTTGCACGACGCTTC 65


RESULT 149
HUMPS02/c
LOCUS       HUMPS02                 352 bp    DNA     linear   PRI 10-JAN-1995
DEFINITION  Human S protein-alpha (PS-alpha) gene, exon 2.
ACCESSION   M57841 J02917
VERSION     M57841.1  GI:190535
KEYWORDS    S protein; anticoagulant cofactor; vitamin K-dependent protein.
SEGMENT     2 of 14
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 352)
  AUTHORS   Schmidel,D.K., Tatro,A.V., Phelps,L.G., Tomczak,J.A. and Long,G.L.
  TITLE     Organization of the human protein S genes
  JOURNAL   Biochemistry 29 (34), 7845-7852 (1990)
  MEDLINE   91084444
   PUBMED   2148110
COMMENT     Original source text: Human liver DNA.
FEATURES             Location/Qualifiers
     source          1. .352
                     /organism="Homo sapiens"
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                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"
                     /map="3p11-q11.2"
                     /tissue_type="liver"
     sig_peptide     join(M57840.1:837. .912,135. .181)
                     /gene="PS-alpha"
     intron          order(M57840.1:913. .1014,1. .134)
                     /gene="PROS1"
                     /number=1
     exon            135. .292
                     /gene="PROS1"
                     /note="G00-120-721"
                     /number=2

  Query Match              0.7%;  Score 20.2;  DB 1;  Length 352;
  Best Local Similarity   51.7%;  Pred. No. 1.1e+02;
  Matches   46;  Conservative    0;  Mismatches   43;  Indels    0;  Gaps    0;

Qy        726 CTTCTATTTCTTGATTTCTATCTTGGCTCATTTTTAACTCAGTAGTGAGTTGTTTGGTTT 785
              |||||  ||  |         |||| | |   || |   |||  | |    ||||||||||
Db        260 CTTCTTCTTTATTGCACAGTTCTTCGATGCATTCTCTTTCAAGATTACCCTGTTTGGTTT 201

Qy        786 CCATAAGTTTGTAAGTTTTCTGTTGTTTC 814
              |   ||||    || ||    |  | |||
Db        200 CTTCAAGTAAAGAATTTGCACGACGCTTC 172


RESULT 150
AX342934
LOCUS       AX342934                 537 bp    DNA     linear   PAT 12-JAN-2002
DEFINITION  Sequence 1 from Patent WO0198467.
ACCESSION   AX342934
VERSION     AX342934.1  GI:18152213
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Xiao,Y. and Morozov,V.
  TITLE     Regulation of human prostasin-like serine protease
  JOURNAL   Patent: WO 0198467-A 1 27-DEC-2001;
            Bayer Aktiengesellschaft (DE)
FEATURES             Location/Qualifiers
     source          1. .537
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match              0.7%;  Score 20.2;  DB 1;  Length 537;
  Best Local Similarity   59.6%;  Pred. No. 1.2e+02;
  Matches   34;  Conservative    0;  Mismatches   23;  Indels    0;  Gaps    0;

Qy        272 GCTCCTTTGATCACTCCTCCAGGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCT 328
              ||  | ||      | | ||| | |||| ||||| |||| |  |||   |  |||||
Db        161 GCAGCCTTAGCTCCACTTCCTGTAGCACCCAGGGGAGAGGCAGAGGATCTGCCTCCT 217


RESULT 151
AR108139/c
LOCUS       AR108139                 885 bp    DNA     linear   PAT 14-FEB-2001
DEFINITION  Sequence 1 from patent US 6110721.
ACCESSION   AR108139
VERSION     AR108139.1  GI:12823626
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 885)
  AUTHORS   Gibbs,C.S., Leung,L.L.K. and Tsiang,M.
  TITLE     Polypeptides and coagulation therapy
  JOURNAL   Patent: US 6110721-A 1 29-AUG-2000;
FEATURES             Location/Qualifiers
     source          1. .885
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match              0.7%;  Score 20.2;  DB 1;  Length 885;
  Best Local Similarity   63.3%;  Pred. No. 1.2e+02;
  Matches   31;  Conservative    0;  Mismatches   18;  Indels    0;  Gaps    0;

Qy        603 GGCTGCTGCCTTTCTCCCTGTCTGATTCCTAGGGTGAGGGTTACCACTG 651
              ||||||  | ||  ||  | | | ||  |  |||||||  ||   |||||
Db        489 GGCTGCCGTCTCCCTGTCGGGCAGACACACAGGGTGAATGTAGTCACTG 441


RESULT 152
AX401899/c
LOCUS       AX401899                 1543 bp    DNA     linear   PAT 06-JUN-2002
DEFINITION  Sequence 1575 from Patent WO0210453.
ACCESSION   AX401899
VERSION     AX401899.1  GI:21338079
KEYWORDS    .
SOURCE      Rattus norvegicus (Norway rat)
  ORGANISM  Rattus norvegicus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
            Rattus.
REFERENCE   1
  AUTHORS   Mendrick,D., Porter,M.W., Johnson,K.R., Castle,A.L. and
            Elashoff,M.R.
  TITLE     Molecular toxicology modeling
  JOURNAL   Patent: WO 0210453-A 1575 07-FEB-2002;
            Gene Logic, Inc. (US)
FEATURES             Location/Qualifiers
     source          1. .1543
                     /organism="Rattus norvegicus"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:10116"
                     /note="EMBL/GenBank Accession No. NM_012803"

  Query Match              0.7%;  Score 20.2;  DB 1;  Length 1543;
  Best Local Similarity   68.3%;  Pred. No. 1.3e+02;
  Matches   28;  Conservative    0;  Mismatches   13;  Indels    0;  Gaps    0;

Qy       1356 CATCCTTTTACTCTAAGGTGATGTCTATCCATGGTAGGTTG 1396
              |||||  ||| |  |||  |  | |||  ||||||   |||| |
Db       1408 CATCCCTTTCCCCTATGTAGCTGTGGATCCATTTGAGGTAG 1368


RESULT 153
RNPROC/c
LOCUS       RNPROC                   1543 bp    mRNA    linear   ROD 12-NOV-2003
DEFINITION  Rattus norvegicus mRNA for protein C precursor.
ACCESSION   X64336 S40352
VERSION     X64336.1  GI:56962
KEYWORDS    protein C.
SOURCE      Rattus norvegicus (Norway rat)
  ORGANISM  Rattus norvegicus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
            Rattus.
REFERENCE   1  (bases 1 to 1543)
  AUTHORS   Okafuji,T., Maekawa,K., Nawa,K. and Marumoto,Y.
  TITLE     The cDNA cloning and mRNA expression of rat protein C
  JOURNAL   Biochim. Biophys. Acta 1131 (3), 329-332 (1992)
  MEDLINE   92329550
   PUBMED   1627650
REFERENCE   2  (bases 1 to 1543)
  AUTHORS   Okafuji,T.
  TITLE     Direct Submission
  JOURNAL   Submitted (03-FEB-1992) Okafuji T., Mol Biology Research Lab,
            Daiichi Pharmaceutical Co LTD, 16-13 Kitakasai 1-Chome, Edogawa-ku,
            Tokyo 134, JAPAN
COMMENT     On Nov 19, 2003 this sequence version replaced gi:251769.
FEATURES             Location/Qualifiers
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     source          1. .1543
                     /organism="Rattus norvegicus"
                     /mol_type="mRNA"
                     /strain="Wistar"
                     /db_xref="taxon:10116"
                     /clone="28000"
     CDS             49. .1434
                     /codon_start=1
                     /product="protein C precursor"
                     /protein_id="CAA45617.1"
                     /db_xref="GI:56963"
                     /db_xref="GOA:P31394"
                     /db_xref="SWISS-PROT:P31394"
                     /translation="MWQFRIFLLFASTWGISGVSAHPDPVFSSSEGAHQVLRVRRANS
                     FLEEVRAGSLERECMEEICDFEEAQEIFQNVEDTLAFWIKYFDGDQCSTPPLDHQCDS
                     PCCGHGTCIDGLGGFSCSCDKGWEGRFCQQEMGFQDCRVKNGGCYHYCLEETRGRRCR
                     CAPGYELADDHMHCRPTVNFPCGKLWKRTDKKRKNFKRDIDPEDEELELGPRIVNGTL
                     TKQGDSPWQAILLDSKKKLACGGVLIHTSWVLTAAHCLESSKKLTVRLGEYDLRRRDP
                     WELDLDIKEVLVHPNYTRSNSDNDIALLRLSQPATLSKTIVPICLPNSGLAQELSQAG
                     QETVVTGWGYQSDKVKDGRRNRTFILTFIRIPLAARNDCMQVMNNVVSENMLCAGIIG
                     DTRDACDGDSGGPMVVFFRGTWFLVGLVSWGEGCGHLNNYGVYTKVGSYLKWIHSYIG
                     ERDVSLKSPKL"
     sig_peptide     49. .147
     mat_peptide     169. .1431
                     /product="protein C"
     polyA_signal    1514. .1519

  Query Match             0.7%;  Score 20.2;  DB 1;  Length 1543;
  Best Local Similarity   68.3%;  Pred. No. 1.3e+02;
  Matches   28;  Conservative    0;  Mismatches   13;  Indels    0;  Gaps    0;

Qy       1356 CATCCTTTTACTCTAAGGTGATGTCTATCCATGGTAGGTTG 1396
              ||||| ||| | ||| |  | |||  ||||||  |||| |
Db       1408 CATCCCTTTCCCCTATGTAGCTGTGGATCCATTTGAGGTAG 1368


RESULT 154
AF011899/c
LOCUS       AF011899                855 bp    mRNA    linear   VRT 09-SEP-1997
DEFINITION  Petromyzon marinus trypsinogen a3 (TRYPA3) mRNA, complete cds.
ACCESSION   AF011899
VERSION     AF011899.1  GI:2367496
KEYWORDS    .
SOURCE      Petromyzon marinus (sea lamprey)
  ORGANISM  Petromyzon marinus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Hyperoartia;
            Petromyzontiformes; Petromyzontidae; Petromyzon.
REFERENCE   1  (bases 1 to 855)
  AUTHORS   Roach,J.C.
  TITLE     The Molecular Evolution of the Vertebrate Trypsinogens
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 855)
  AUTHORS   Roach,J.C.
  TITLE     Direct Submission
  JOURNAL   Submitted (01-JUL-1997) Molecular Biotechnology, University of
            Washington, Seattle, WA 98195, USA
FEATURES             Location/Qualifiers
     source          1. .855
                     /organism="Petromyzon marinus"
                     /mol_type="mRNA"
                     /db_xref="taxon:7757"
                     /dev_stage="ammocoete"
                     /tissue_lib="anterior intestine"
     gene            1. .855
                     /gene="TRYPA3"
     CDS             1. .744
                     /gene="TRYPA3"
                     /codon_start=1
                     /product="trypsinogen a3"
                     /protein_id="AAB69655.1"
                     /db_xref="GI:2367497"
                     /translation="MHGLILALLVGVAAAAPYMYEDHIVGGSECAAHSQPWQVSLNIG
                     YHFCGGSLINSQWVVSAAHCYQTASRISVRIGEHNIFVNEGTEQQIQASKAIQHPQYN
                     SWTIDNDIMLIKLSSPATLNQYAQAIALPSSCVNTGVMCTISGWGETQTSVGSPDVLM
                     CVQAPVLSDTSCRNSYPGDITNNMICLGYLEGGKDSCQGDSGGPVVCNGELQGIVSWG
                     RGCALPNYPGVYTKVCNYNAWIAQTIAAN"
     sig_peptide     1. .45
                     /gene="TRYPA3"
                     /evidence=not_experimental
     mat_peptide     46. .741
                     /gene="TRYPA3"
                     /product="trypsin a3"
                     /evidence=not_experimental

  Query Match             0.7%;  Score 20;  DB 1;  Length 855;
  Best Local Similarity   65.9%;  Pred. No. 1.4e+02;
  Matches   29;  Conservative    0;  Mismatches   15;  Indels    0;  Gaps    0;

Qy       1988 TTTTAATATTCTTTCTTTGTTCTATACTTTTAGTGATTTGATTA 2031
              ||||  | || |||  ||  |  | | ||||| | ||||| |||
Db        855 TTTTTTTTTTTTTTGATTAGTTCACATTTTTATTCATTTGGTTA 812


RESULT 155
AR234337
LOCUS       AR234337                1130 bp    DNA     linear   PAT 20-DEC-2002
DEFINITION  Sequence 8 from patent US 6458564.
ACCESSION   AR234337
VERSION     AR234337.1  GI:27277021
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 1130)
  AUTHORS   Darrow,A., Qi,J. and Andrade-Grodon,P.
  TITLE     DNA encoding the human serine protease T
  JOURNAL   Patent: US 6458564-A 8 01-OCT-2002;
FEATURES             Location/Qualifiers
     source          1. .1130
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.7%;  Score 20;  DB 1;  Length 1130;
  Best Local Similarity   58.3%;  Pred. No. 1.4e+02;
  Matches   35;  Conservative    0;  Mismatches   25;  Indels    0;  Gaps    0;

Qy       1151 TGCTTGTTTTATGAACTTGGGTGACATTGTGTTTGGTGCATAGACATTAAGAATTGCAAT 1210
              |||||  |||  |||| || |      |  || ||  |   ||  |||||  |  ||||||
Db       1059 TGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAAT 1118


RESULT 156
AR219285
LOCUS       AR219285                1142 bp    DNA     linear   PAT 25-SEP-2002
DEFINITION  Sequence 8 from patent US 6420157.
ACCESSION   AR219285
VERSION     AR219285.1  GI:23320255
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 1142)
  AUTHORS   Darrow,A., Qi,J. and Andrade-Grodon,P.
  TITLE     Zymogen activation system
  JOURNAL   Patent: US 6420157-A 8 16-JUL-2002;
FEATURES             Location/Qualifiers
     source          1. .1142
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.7%;  Score 20;  DB 1;  Length 1142;
  Best Local Similarity   58.3%;  Pred. No. 1.4e+02;
  Matches   35;  Conservative    0;  Mismatches   25;  Indels    0;  Gaps    0;

Qy       1151 TGCTTGTTTTATGAACTTGGGTGACATTGTGTTTGGTGCATAGACATTAAGAATTGCAAT 1210
              |||||  |||  |||| || |      |  || ||  |   ||  |||||  |  ||||||
```

```
Db       1071 TGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAAT 1130


RESULT 157
AR221273
LOCUS       AR221273               1166 bp    DNA     linear   PAT 26-SEP-2002
DEFINITION  Sequence 2 from patent US 6426199.
ACCESSION   AR221273
VERSION     AR221273.1  GI:23328188
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 1166)
  AUTHORS   Darrow,A., Qi,J. and Andrade-Grodon,P.
  TITLE     DNA
  JOURNAL   Patent: US 6426199-A 2 30-JUL-2002;
FEATURES             Location/Qualifiers
     source          1. .1166
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.7%;  Score 20;  DB 1;  Length 1166;
  Best Local Similarity   58.3%;  Pred. No. 1.4e+02;
  Matches   35;  Conservative    0;  Mismatches   25;  Indels    0;  Gaps    0;

Qy       1151 TGCTTGTTTTATGAACTTGGGTGACATTGTGTTTGGTGCATAGACATTAAGAATTGCAAT 1210
             |||||  |||  ||||  ||  |       |  ||  ||  |   ||  |||||  |  ||||||
Db       1095 TGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAAT 1154


RESULT 158
AR219284
LOCUS       AR219284               1169 bp    DNA     linear   PAT 25-SEP-2002
DEFINITION  Sequence 7 from patent US 6420157.
ACCESSION   AR219284
VERSION     AR219284.1  GI:23320254
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 1169)
  AUTHORS   Darrow,A., Qi,J. and Andrade-Grodon,P.
  TITLE     Zymogen activation system
  JOURNAL   Patent: US 6420157-A 7 16-JUL-2002;
FEATURES             Location/Qualifiers
     source          1. .1169
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.7%;  Score 20;  DB 1;  Length 1169;
  Best Local Similarity   58.3%;  Pred. No. 1.4e+02;
  Matches   35;  Conservative    0;  Mismatches   25;  Indels    0;  Gaps    0;

Qy       1151 TGCTTGTTTTATGAACTTGGGTGACATTGTGTTTGGTGCATAGACATTAAGAATTGCAAT 1210
             |||||  |||  ||||  ||  |       |  ||  ||  |   ||  |||||  |  ||||||
Db       1098 TGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAAT 1157


RESULT 159
AF515269/c
LOCUS       AF515269               1722 bp    mRNA    linear   VRT 15-NOV-2002
DEFINITION  Danio rerio coagulation factor VIIi mRNA, complete cds.
ACCESSION   AF515269
VERSION     AF515269.1  GI:25005098
KEYWORDS    .
SOURCE      Danio rerio (zebrafish)
  ORGANISM  Danio rerio
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Actinopterygii; Neopterygii; Teleostei; Ostariophysi;
            Cypriniformes; Cyprinidae; Danio.
REFERENCE   1  (bases 1 to 1722)
  AUTHORS   Hanumanthaiah,R., Day,K. and Jagadeeswaran,P.
  TITLE     Comprehensive analysis of blood coagulation pathways in teleostei:
            Evolution of coagulation factor genes and identification of
            zebrafish factor VIIi
  JOURNAL   Blood Cells Mol. Dis. (2002) In press
REFERENCE   2  (bases 1 to 1722)
  AUTHORS   Jagadeeswaran,P. and Hanumanthaiah,R.
  TITLE     Direct Submission
  JOURNAL   Submitted (24-MAY-2002) Cellular & Structural Biology, University
            of Texas Health Science Center at San Antonio, 7703 Floyd Curl
            Drive, San Antonio, TX 78229, USA
FEATURES             Location/Qualifiers
     source          1. .1722
                     /organism="Danio rerio"
                     /mol_type="mRNA"
                     /db_xref="taxon:7955"
     CDS             27. .1358
                     /note="clotting factor"
                     /codon_start=1
                     /product="coagulation factor VIIi"
                     /protein_id="AAN71000.1"
                     /db_xref="GI:25005099"
                     /translation="MTLGAAAVLLCVLTLRSTSAVFLSKDEASALLQRFRRANSGFLE
                     EMKAGNLERECVEEICDYEEAREVFEDDDRTKQFWLSYSNKEPCLTNPCRNNGTCVYL
                     ADSYYCLCSEGYEGKYCEKGLEETLKCQYVNGGCEQFCDGSGARRSCSCAEGYALADD
                     GTSCVSQVDYPCGKIPVQKNTSQNQFLGGIHCPRGHCPWQVLIDYNGESVCGGALLEG
                     PWLITAAHCVHQKDTRFLKAVTGEHDLDVLDGSEEPYEVSAVFIHPNYDPETLDSDLA
                     LLRLRVPVQRSLYAVPICLPTPQLARSELWAARFHTLSGWGTRTAGHNLRREKGLKGP
                     ASGTLQRLAVPLLPAAQCGNANTTANMFCAGYTEGDHASCRGHDGSPLVTRYGETSFL
                     TGVVSWGRGCGPPGYYWIYTKVENFLIWMDTVMKTNTEDKSEQIANVSTKN"

  Query Match             0.7%;  Score 20;  DB 1;  Length 1722;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+02;
  Matches   50;  Conservative    0;  Mismatches   50;  Indels    0;  Gaps    0;

Qy       1400 TTTTTGGATGCAGCAGTAGGATGGATCTTGTTTTCATATCCATTCTGTTACCCAGTATCT 1459
             |||||  |  | ||  |||  |      || | | | || | || | | |  |    || |
Db       1354 TTTTTAGTGGAAACATTAGCAATCTGCTCGCTCTTATCTTCAGTGTTTGTCTTCATAACC 1295

Qy       1460 TTTTCTAGAGAAATTAAGATCATTGAGTCATTGATGTTGA 1499
                | ||  |  | ||  | ||    |      | ||  ||| ||
Db       1294 GTGTCCATCCAGATCAGGAAGTTCTCCACTTTAGTGTAGA 1255


RESULT 160
HUMDPB1A
LOCUS       HUMDPB1A               249 bp    DNA     linear   PRI 07-NOV-1994
DEFINITION  Human DPB1 protein gene, partial cds.
ACCESSION   M77674
VERSION     M77674.1  GI:181735
KEYWORDS    DPB1 protein.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 249)
  AUTHORS   Gao,X., Veale,A. and Serjeantson,S.
  TITLE     AB1: a novel HLA-DPB1 allele found in one third of an Australian
            population
  JOURNAL   Immunogenetics 36 (1), 64-66 (1992)
  MEDLINE   92267574
   PUBMED   1587554
COMMENT     Original source text: Homo sapiens blood DNA.
FEATURES             Location/Qualifiers
     source          1. .249
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"
                     /map="6p21.3"
                     /cell_type="lymphocyte"
                     /tissue_type="blood"
     gene            1. .249
                     /gene="HLA-DPB1"
     misc_feature    1. .249
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                     /gene="HLA-DPB1"
                     /note="G00-120-636"

  Query Match             0.7%;  Score 19.8;  DB 1;  Length 249;
  Best Local Similarity   51.7%;  Pred. No. 1.4e+02;
  Matches   45;  Conservative    0;  Mismatches   42;  Indels    0;  Gaps    0;

Qy        292 AGGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCAGGCCCAATGA 351
              ||| | ||    |||| ||||  | |    | ||     ||| || |||||  ||    |
Db        143 AGGCGGAGTACTGGAACAGCCAGAAGGACATCCTGGAGGAGAAGCGGGCAGTGCCGGACA 202

Qy        352 TCATGTGGTCAGTCCCCTGGGTACAGG 378
                |||||   |  |  ||  |  | ||
Db        203 GGATGTGCAGACACAACTACGAGCTGG 229


RESULT 161
HUMDPBA
LOCUS       HUMDPBA                  249 bp    DNA     linear   PRI 14-APR-2000
DEFINITION  Homo sapiens gene for HLA-DP beta, partial cds, clone:SSK1.
ACCESSION   D10478
VERSION     D10478.1  GI:219604
KEYWORDS    HLA-DP beta; DPB1; MHC; human leukocyte antigen; major
            histocompatibility complex class II molecule.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (sites)
  AUTHORS   Mitsunaga,S., Kuwata,S., Tokunaga,K., Uchikawa,C., Takahashi,K.,
            Akaza,T., Mitomi,Y. and Juji,T.
  TITLE     Family study on HLA-DPB1 polymorphism: linkage analysis with
            HLA-DR/DQ and two 'new' alleles
  JOURNAL   Hum. Immunol. 34 (3), 203-211 (1992)
  MEDLINE   93053849
   PUBMED   1358867
REFERENCE   2  (bases 1 to 249)
  AUTHORS   Mitsunaga,S.
  JOURNAL   Unpublished
COMMENT     Submitted (17-Feb-1992) to DDBJ by:
            Katsushi Tokunaga
            Dept. of Transfusion Medicine and
            Immunohematology, Faculty of Medicine
            The University of Tokyo
            7-3-1 Hongo, Bunkyo-ku
            Tokyo 113
            Japan
            Phone:  03-3815-5411 x8880
            Fax:    03-3816-2516.
FEATURES             Location/Qualifiers
     source          1. .249
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /isolate="THKK"
                     /db_xref="taxon:9606"
                     /chromosome="6"
                     /clone="SSK1"
                     /cell_type="peripheral blood mononuclear cell"
     gene            1. .249
                     /gene="DPB1"
     CDS             <1. .>249
                     /gene="DPB1"
                     /codon_start=1
                     /product="HLA-DP beta"
                     /protein_id="BAA01281.1"
                     /db_xref="GI:219605"
                     /translation="LFQGRQECYPFNGTQRFLERYIYNREELVRFDSDVGEFRAVTEL
                     GRPEAEYWNSQKDILEEKRAVPDRMCRHNYELDEAVTLQ"
     exon            1. .249
                     /gene="DPB1"
                     /number=2
     old_sequence    1
                     /gene="DPB1"
                     /citation=[1]
                     /replace="cctccccgcagagaattac"
     old_sequence    249
                     /gene="DPB1"
                     /citation=[1]
                     /replace="cgccgaggtgagtgagggct"

  Query Match             0.7%;  Score 19.8;  DB 1;  Length 249;
  Best Local Similarity   51.7%;  Pred. No. 1.4e+02;
  Matches   45;  Conservative    0;  Mismatches   42;  Indels    0;  Gaps    0;

Qy        292 AGGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCAGGCCCAATGA 351
              ||| | ||    |||| ||||  | |    | ||     ||| || |||||  ||    |
Db        143 AGGCGGAGTACTGGAACAGCCAGAAGGACATCCTGGAGGAGAAGCGGGCAGTGCCGGACA 202

Qy        352 TCATGTGGTCAGTCCCCTGGGTACAGG 378
                |||||   |  |  ||  |  | ||
Db        203 GGATGTGCAGACACAACTACGAGCTGG 229


RESULT 162
HUMDPBB
LOCUS       HUMDPBB                  249 bp    DNA     linear   PRI 14-APR-2000
DEFINITION  Homo sapiens gene for HLA-DP beta, partial cds, clone:SSK2.
ACCESSION   D10479
VERSION     D10479.1  GI:219606
KEYWORDS    HLA-DP beta; DPB1; MHC; human leukocyte antigen; major
            histocompatibility complex class II molecule.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (sites)
  AUTHORS   Mitsunaga,S., Kuwata,S., Tokunaga,K., Uchikawa,C., Takahashi,K.,
            Akaza,T., Mitomi,Y. and Juji,T.
  TITLE     Family study on HLA-DPB1 polymorphism: linkage analysis with
            HLA-DR/DQ and two 'new' alleles
  JOURNAL   Hum. Immunol. 34 (3), 203-211 (1992)
  MEDLINE   93053849
   PUBMED   1358867
REFERENCE   2  (bases 1 to 249)
  AUTHORS   Mitsunaga,S.
  JOURNAL   Unpublished
COMMENT     Submitted (17-Feb-1992) to DDBJ by:
            Katsushi Tokunaga
            Dept. of Transfusion Medicine and
            Immunohematology, Faculty of Medicine
            The University of Tokyo
            7-3-1 Hongo, Bunkyo-ku
            Tokyo 113
            Japan
            Phone:  03-3815-5411 x8880
            Fax:    03-3816-2516.
FEATURES             Location/Qualifiers
     source          1. .249
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /isolate="THMI"
                     /db_xref="taxon:9606"
                     /chromosome="6"
                     /clone="SSK2"
                     /cell_type="peripheral blood mononuclear cell"
     gene            1. .249
                     /gene="DPB1"
     CDS             <1. .>249
                     /gene="DPB1"
                     /codon_start=1
                     /product="HLA-DP beta"
                     /protein_id="BAA01282.1"
                     /db_xref="GI:219607"
                     /translation="VYQLRQECYAFNGTQRFLERYIYNREELVRFDSDVGEFRAVTEL
                     GRPEAEYWNSQKDILEEKRAVPDRMCRHNYELDEAVTLQ"
     exon            1. .249
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                     /gene="DPB1"
                     /number=2
     old_sequence    1
                     /gene="DPB1"
                     /citation=[1]
                     /replace="cctccccgcagagaattac"
     old_sequence    249
                     /gene="DPB1"
                     /citation=[1]
                     /replace="cgccgaggtgagtgagggct"

  Query Match              0.7%;  Score 19.8;  DB 1;  Length 249;
  Best Local Similarity   51.7%;  Pred. No. 1.4e+02;
  Matches   45;  Conservative    0;  Mismatches   42;  Indels    0;  Gaps    0;

Qy        292 AGGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCAGGCCCAATGA 351
              ||| | ||    |||| ||||  | |    | ||     ||| || |||||  ||    |
Db        143 AGGCGGAGTACTGGAACAGCCAGAAGGACATCCTGGAGGAGAAGCGGGCAGTGCCGGACA 202

Qy        352 TCATGTGGTCAGTCCCCTGGGTACAGG 378
                |||||   |  |  ||  |  | ||
Db        203 GGATGTGCAGACACAACTACGAGCTGG 229


RESULT 163
HUMMHDPBH
LOCUS       HUMMHDPBH                249 bp    DNA     linear   PRI 07-JAN-1995
DEFINITION  Human MHC class II HLA DP-beta gene, exon 2 allele DPB5.
ACCESSION   M23680
VERSION     M23680.1  GI:188070
KEYWORDS    HLA-DP antigen; cell surface glycoprotein; class II gene; integral
            membrane protein; major histocompatibility complex.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 249)
  AUTHORS   Bugawan,T.L., Horn,G.T., Long,C.M., Mickelson,E., Hansen,J.A.,
            Ferrara,G.B., Angelini,G. and Erlich,H.A.
  TITLE     Analysis of HLA-DP allelic sequence polymorphism using the in vitro
            enzymatic DNA amplification of DP-alpha and DP-beta loci
  JOURNAL   J. Immunol. 141 (11), 4024-4030 (1988)
  MEDLINE   89035547
   PUBMED   2460556
COMMENT     Original source text: Human DNA allele DPB5.
FEATURES             Location/Qualifiers
     source          1. .249
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"
                     /map="6p21.3"
     gene            1. .249
                     /gene="HLA-DPB1"
     CDS             <1. .>249
                     /gene="HLA-DPB1"
                     /note="MHC DP-beta, allele DPB5"
                     /number=2
                     /codon_start=1
                     /protein_id="AAA59745.1"
                     /db_xref="GI:188071"
                     /db_xref="GDB:G00-120-636"
                     /translation="LFQGRQECYAFNGTQRFLERYIYNREELVRFDSDVGEFRAVTEL
                     GRPEAEYWNSQKDILEEKRAVPDRMCRHNYELDEAVTLQ"

  Query Match              0.7%;  Score 19.8;  DB 1;  Length 249;
  Best Local Similarity   51.7%;  Pred. No. 1.4e+02;
  Matches   45;  Conservative    0;  Mismatches   42;  Indels    0;  Gaps    0;

Qy        292 AGGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCAGGCCCAATGA 351
              ||| | ||    |||| ||||  | |    | ||     ||| || |||||  ||    |
Db        143 AGGCGGAGTACTGGAACAGCCAGAAGGACATCCTGGAGGAGAAGCGGGCAGTGCCGGACA 202

Qy        352 TCATGTGGTCAGTCCCCTGGGTACAGG 378
                |||||   |  |  ||  |  | ||
Db        203 GGATGTGCAGACACAACTACGAGCTGG 229


RESULT 164
AX587861/c
LOCUS       AX587861                 254 bp    DNA     linear   PAT 10-JAN-2003
DEFINITION  Sequence 331 from Patent WO0246467.
ACCESSION   AX587861
VERSION     AX587861.1  GI:27656555
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Bertucci,F., Houlgatte,R., Birnbaum,D., Nguyen,C., Viens,P. and
            Fert,V.
  TITLE     Gene expression profiling of primary breast carcinomas using arrays
            of candidate genes
  JOURNAL   Patent: WO 0246467-A 331 13-JUN-2002;
            Ipsogen (FR)
FEATURES             Location/Qualifiers
     source          1. .254
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="primer"
     misc_feature    1. .254
                     /note="3' terminal sequence. macrophage stimulating
                     (hepatocyte growth factor-like) (MST1) gene."

  Query Match              0.7%;  Score 19.8;  DB 1;  Length 254;
  Best Local Similarity   51.7%;  Pred. No. 1.4e+02;
  Matches   45;  Conservative    0;  Mismatches   42;  Indels    0;  Gaps    0;

Qy       1584 TGTGTGTGTGTGTGTGTGTGTGTGTGTCTGTGTCTGTGTCTTGTGTGTCTGTGTTC 1643
              |||  |    | |||| | ||||| ||||     |  ||       |  || | ||| |||
Db        136 TGTCTTCACGCGTGTCTCTGTGTTTGTGGACTGGATTCACAAGGTCATGAGACTGGGTTA 77

Qy       1644 TCTCCCCTCTTTTGATTTTTGGCCTGG 1670
                | |  |  |  ||   | || | |||
Db         76 GCCCAGCCTTGATGCCATATGCCTTGG 50


RESULT 165
HUMMHDP1H
LOCUS       HUMMHDP1H                256 bp    DNA     linear   PRI 07-JAN-1995
DEFINITION  Human MHC class II HLA DP-beta (allele DPB5), partial cds.
ACCESSION   M62333
VERSION     M62333.1  GI:188026
KEYWORDS    HLA-DP antigen; cell surface glycoprotein; class II gene; integral
            membrane glycoprotein; major histocompatibility complex.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 256)
  AUTHORS   Bugawan,T.L., Begovich,A.B. and Erlich,H.A.
  TITLE     Rapid HLA-DPB typing using enzymatically amplified DNA and
            nonradioactive sequence-specific oligonucleotide probes
  JOURNAL   Immunogenetics 32 (4), 231-241 (1990)
  MEDLINE   91055805
   PUBMED   2242906
COMMENT     Original source text: Human DNA allele DPB5.
FEATURES             Location/Qualifiers
     source          1. .256
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"
                     /map="6p21.3"
     gene            1. .256
                     /gene="HLA-DPB1"
     CDS             1. .256
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                    /gene="HLA-DPB1"
                    /codon_start=1
                    /product="MHC class II HLA-DP-beta-1"
                    /protein_id="AAA59726.1"
                    /db_xref="GI:553549"
                    /db_xref="GDB:G00-120-636"
                    /translation="LFQGRQECYAFNGTQRFLERYIYNREELVRFDSDVGEFRAVTEL
                    GRPEAEYWNSQKDILEEKRAVPDRMCRHNYELDEAVTLQRR"

  Query Match             0.7%;  Score 19.8;  DB 1;  Length 256;
  Best Local Similarity   51.7%;  Pred. No. 1.4e+02;
  Matches   45;  Conservative    0;  Mismatches   42;  Indels    0;  Gaps    0;

Qy        292 AGGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCAGGCCCAATGA 351
              ||| | ||    |||| ||||  | |    | ||     ||| || |||||  ||    |
Db        143 AGGCGGAGTACTGGAACAGCCAGAAGGACATCCTGGAGGAGAAGCGGGCAGTGCCGGACA 202

Qy        352 TCATGTGGTCAGTCCCCTGGGTACAGG 378
                |||||   |  |  ||  |  | ||
Db        203 GGATGTGCAGACACAACTACGAGCTGG 229


RESULT 166
AF180970
LOCUS       AF180970                257 bp    DNA     linear   PRI 02-JUN-2001
DEFINITION  Homo sapiens MHC class II antigen (HLA-DPB1) gene, HLA-DPB1 variant
            allele, partial cds.
ACCESSION   AF180970
VERSION     AF180970.1  GI:14279142
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 257)
  AUTHORS   Xu,A., Huang,H., Liu,Z., Chen,W., Pan,D., Lin,J., Xu,K., Chen,S.,
            Wang,X. and Chen,R.
  TITLE     A novel HLA-DPB1 allele in Chinese people
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 257)
  AUTHORS   Xu,A., Huang,H., Liu,Z., Chen,W., Pan,D., Lin,J., Xu,K., Chen,S.,
            Wang,X. and Chen,R.
  TITLE     Direct Submission
  JOURNAL   Submitted (26-AUG-1999) Biochemistry, School of Life Science, 135
            Xingangxi Road, Guangzhou, Guangdong 510275, P.R.China
FEATURES             Location/Qualifiers
     source          1. .257
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"
                     /chromosome="6"
                     /map="6p21.3"
     gene            <1. .>257
                     /gene="HLA-DPB1"
                     /allele="HLA-DPB1 variant"
     mRNA            <1. .>257
                     /gene="HLA-DPB1"
                     /product="MHC class II antigen"
     CDS             <1. .>257
                     /gene="HLA-DPB1"
                     /note="membrane protein"
                     /codon_start=3
                     /product="MHC class II antigen"
                     /protein_id="AAK58508.1"
                     /db_xref="GI:14279143"
                     /translation="NYLFQGRQECYAFNGTQCFLERYIYNREELVRFDSDVGEFRAVT
                     ELGRPEAEYWNSQKDILEEKRAVPDRMCRHNYELDEAVTLQ"
     exon            1. .257
                     /gene="HLA-DPB1"
                     /number=2

  Query Match             0.7%;  Score 19.8;  DB 1;  Length 257;
  Best Local Similarity   51.7%;  Pred. No. 1.4e+02;
  Matches   45;  Conservative    0;  Mismatches   42;  Indels    0;  Gaps    0;

Qy        292 AGGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCAGGCCCAATGA 351
              ||| | ||    |||| ||||  | |    | ||     ||| || |||||  ||    |
Db        151 AGGCGGAGTACTGGAACAGCCAGAAGGACATCCTGGAGGAGAAGCGGGCAGTGCCGGACA 210

Qy        352 TCATGTGGTCAGTCCCCTGGGTACAGG 378
                |||||   |  |  ||  |  | ||
Db        211 GGATGTGCAGACACAACTACGAGCTGG 237


RESULT 167
HUMDPB1KT
LOCUS       HUMDPB1KT               264 bp    DNA     linear   PRI 14-APR-2000
DEFINITION  Human MHC classII HLA-DPB1 gene allele DPB1*KT.
ACCESSION   D10882
VERSION     D10882.1  GI:219602
KEYWORDS    HLA-DP antigen; cell surface glycoprotein; class II gene; integral
            membrane protein; major histocompatibility complex.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 264)
  AUTHORS   Ogawa,K., Itho,H., Nakajyo,S., Kobayashi,K., Sekiguchi,S.,
            Koshizaka,T., Taguchi,M., Onishi,H., Kobayashi,S. and Inoko,H.
  TITLE     A novel HLA-DPB1 allele, DPB1*3601 (DPB1*KT)
  JOURNAL   Tissue Antigens 44 (2), 134-136 (1994)
  MEDLINE   95117110
   PUBMED   7817379
REFERENCE   2  (bases 1 to 264)
  AUTHORS   Koshizaka,T.
  TITLE     Direct Submission
  JOURNAL   Submitted (06-APR-1992) Takuya Koshizaka, Sumitomo Metal
            Industries, Ltd.; 14-15 Kobuchi 2-chome, Sagamihara, Kanagawa 229,
            Japan (Tel:0427-51-7568, Fax:0427-51-7519)
COMMENT     Submitted (06-Apr-1992) to DDBJ by:
            Takuya Koshizaka
            Sumitomo Metal Industries, Ltd.
            14-15 Kobuchi 2-chome
            Sagamihara, Kanagawa 229
            Japan
            Phone:  0427-51-7568
            Fax:    0427-51-7519.
FEATURES             Location/Qualifiers
     source          1. .264
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"
     CDS             <1. .>264
                     /codon_start=3
                     /product="HLA-DPB1"
                     /protein_id="BAA01704.1"
                     /db_xref="GI:219603"
                     /translation="NYVYQLRQECYAFNGTQRFLERYIYNREELVRFDSDVGEFRAVT
                     ELGRPEAEYWNSQKDILEEKRAVPDRMCRHNYELDEAVTLQRR"
     exon            1. .264
                     /number=2

  Query Match             0.7%;  Score 19.8;  DB 1;  Length 264;
  Best Local Similarity   51.7%;  Pred. No. 1.4e+02;
  Matches   45;  Conservative    0;  Mismatches   42;  Indels    0;  Gaps    0;

Qy        292 AGGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCAGGCCCAATGA 351
              ||| | ||    |||| ||||  | |    | ||     ||| || |||||  ||    |
Db        151 AGGCGGAGTACTGGAACAGCCAGAAGGACATCCTGGAGGAGAAGCGGGCAGTGCCGGACA 210

Qy        352 TCATGTGGTCAGTCCCCTGGGTACAGG 378
                |||||   |  |  ||  |  | ||
Db        211 GGATGTGCAGACACAACTACGAGCTGG 237


RESULT 168
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```
HSLKB1PJ7/c
LOCUS       HSLKB1PJ7                268 bp    DNA     linear   PRI 02-MAY-1998
DEFINITION  Homo sapiens Peutz-Jeghers syndrome protein (LKB1) gene, exon 8.
ACCESSION   AF055326
VERSION     AF055326.1  GI:3063582
KEYWORDS    .
SEGMENT     7 of 8
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 268)
  AUTHORS   Avizienyte,E., Roth,S., Loukola,A., Hemminki,A., Lothe,R.A.,
            Stenwig,A.E., Fossa,S.D., Salovaara,R.E. and Aaltonen,L.A.
  TITLE     Somatic mutations in LKB1 are rare in sporadic colorectal and
            testicular tumors
  JOURNAL   Cancer Res. (1998) In press
REFERENCE   2  (bases 1 to 268)
  AUTHORS   Bignell,G.R., Barfoot,R., Seal,S., Collins,N., Warren,W. and
            Stratton,M.R.
  TITLE     Low frequency of somatic mutations in the LKB1/Peutz-Jeghers
            syndrome gene in sporadic breast cancer
  JOURNAL   Cancer Res. 58 (7), 1384-1386 (1998)
  MEDLINE   98196525
   PUBMED   9537235
REFERENCE   3  (bases 1 to 268)
  AUTHORS   Avizienyte,E., Roth,S., Loukola,A., Hemminki,A., Bignell,G.R.,
            Warren,W., Stratton,M.R. and Aaltonen,L.A.
  TITLE     Direct Submission
  JOURNAL   Submitted (25-MAR-1998) Department of Medical Genetics, Haartman
            Institute, University of Helsinki, P.O. Box 21 (Haartmaninkatu 3),
            Helsinki FIN-00014, Finland
FEATURES             Location/Qualifiers
     source          1. .268
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"
                     /chromosome="19"
                     /map="19p13.3"
     exon            41. .228
                     /gene="LKB1"
                     /number=8

  Query Match             0.7%;  Score 19.8;  DB 1;  Length 268;
  Best Local Similarity   60.0%;  Pred. No. 1.4e+02;
  Matches   33;  Conservative    0;  Mismatches   22;  Indels    0;  Gaps    0;

Qy       1374 TGATGTCTATCCATGGTAGGTTGTCTTTTTTGGATGCAGCAGTAGGATGGATCTT 1428
             || |||||    |  ||| || ||     |   | | |||| | ||||||  ||||
Db        105 TGGTGTCTGGGCTCGGTGGGATGGGCACTGGTGCTTCAGCCGGAGGATGTTTCTT 51


RESULT 169
AF336224
LOCUS       AF336224                 283 bp    DNA     linear   PRI 22-MAR-2001
DEFINITION  Homo sapiens MHC class II antigen (HLA-DPB1) gene, HLA-DPB1*3801
            allele, exon 2 and partial cds.
ACCESSION   AF336224
VERSION     AF336224.1  GI:13430229
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 283)
  AUTHORS   Liu,Z., Lin,J., Chen,W., Jia,Z., Pan,D. and Xu,A.
  TITLE     Sequence of complete exon 2 and partial intron 2 of HLA-DPB1*3801
            allele
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 283)
  AUTHORS   Liu,Z., Lin,J., Chen,W., Jia,Z., Pan,D. and Xu,A.
  TITLE     Direct Submission
  JOURNAL   Submitted (16-JAN-2001) Biochemistry Department, Zhongshan (Sun
            Yat-sen) University, 135 W. Xingang Rd, Guangzhou, Guangdong
            510275, P.R. China
FEATURES             Location/Qualifiers
     source          1. .283
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"
                     /chromosome="6"
                     /map="6p21.3"
     gene            <1. .>283
                     /gene="HLA-DPB1"
                     /allele="HLA-DPB1*3801"
     mRNA            <1. .>264
                     /gene="HLA-DPB1"
     CDS             <1. .>264
                     /gene="HLA-DPB1"
                     /codon_start=3
                     /product="MHC class II antigen"
                     /protein_id="AAK25779.1"
                     /db_xref="GI:13430230"
                     /translation="NYLFQGRQECYPFNGTQRFLERYIYNREELVRFDSDVGEFRAVT
                     ELGRPEAEYWNSQKDILEEKRAVPDRMCRHNYELDEAVTLQRR"
     exon            1. .264
                     /gene="HLA-DPB1"
                     /number=2

  Query Match             0.7%;  Score 19.8;  DB 1;  Length 283;
  Best Local Similarity   51.7%;  Pred. No. 1.4e+02;
  Matches   45;  Conservative    0;  Mismatches   42;  Indels    0;  Gaps    0;

Qy        292 AGGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCAGGCCCAATGA 351
              ||| | ||    |||| |||| | | |  | ||    ||| || ||||| ||   |
Db        151 AGGCGGAGTACTGGAACAGCCAGAAGGACATCCTGGAGGAGAAGCGGGCAGTGCCGGACA 210

Qy        352 TCATGTGGTCAGTCCCCTGGGTACAGG 378
              |||||  |  |  ||  |  | ||
Db        211 GGATGTGCAGACACAACTACGAGCTGG 237


RESULT 170
AF492638
LOCUS       AF492638                 285 bp    DNA     linear   PRI 01-APR-2003
DEFINITION  Homo sapiens MHC class II antigen (HLA-DPB1) gene, HLA-DPB1*0501
            allele, exon 2 and partial cds.
ACCESSION   AF492638
VERSION     AF492638.1  GI:29422764
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 285)
  AUTHORS   Luo,M., Mao,X., Shehzad,I., Jacobson,K., Kwan,L., Shroeder,M. and
            Plummer,F.A.
  TITLE     Sequence-Based DPB Typing Fills the Missing Exon 2 Sequences of
            Multiple HLA-DPB1 Alleles
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 285)
  AUTHORS   Luo,M., Mao,X., Shehzad,I., Jacobson,K., Kwan,L., Shroeder,M. and
            Plummer,F.A.
  TITLE     Direct Submission
  JOURNAL   Submitted (14-MAR-2002) Medical Microbiology, University of
            Manitoba, R507 BMSB, 730 William Avenue, Winnipeg, Manitoba R3E
            0W3, Canada
FEATURES             Location/Qualifiers
     source          1. .285
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"
     gene            <1. .>285
                     /gene="HLA-DPB1"
                     /allele="HLA-DPB1*0501"
     mRNA            <20. .>283
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                     /gene="HLA-DPB1"
                     /product="MHC class II antigen"
     CDS             <20. .>283
                     /gene="HLA-DPB1"
                     /codon_start=3
                     /product="MHC class II antigen"
                     /protein_id="AAO84763.1"
                     /db_xref="GI:29422765"
                     /translation="NYLFQGRQECYAFNGTQRFLERYIYNREELVRFDSDVGEFRAVT
                     ELGRPEAEYWNSQKDILEEKRAVPDRMCRHNYELDEAVTLQRR"
     exon            20. .283
                     /gene="HLA-DPB1"
                     /number=2

  Query Match              0.7%;  Score 19.8;  DB 1;  Length 285;
  Best Local Similarity   51.7%;  Pred. No. 1.4e+02;
  Matches   45;  Conservative    0;  Mismatches   42;  Indels    0;  Gaps    0;

Qy        292 AGGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCAGGCCCAATGA 351
              ||| | ||    |||| |||| | |    | ||     ||| || |||||  ||    |
Db        170 AGGCGGAGTACTGGAACAGCCAGAAGGACATCCTGGAGGAGAAGCGGGCAGTGCCGGACA 229

Qy        352 TCATGTGGTCAGTCCCCTGGGTACAGG 378
              |||||   |  |  ||  |  | ||
Db        230 GGATGTGCAGACACAACTACGAGCTGG 256


RESULT 171
HUMMHDPBZ
LOCUS       HUMMHDPBZ                285 bp    DNA     linear   PRI 13-JUL-1993
DEFINITION  Human MHC HLA-DPB1 gene, exon 2, clone DPB new A.
ACCESSION   M83912
VERSION     M83912.1  GI:188106
KEYWORDS    lymphocyte antigen; major histocompatibility complex.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 285)
  AUTHORS   Kimura,A.
  JOURNAL   Unpublished (1991)
COMMENT     Original source text: Homo sapiens (individual_isolate SASBE41)
            DNA.
FEATURES             Location/Qualifiers
     source          1. .285
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /isolate="SASBE41"
                     /db_xref="taxon:9606"
                     /map="6p"
                     /cell_type="granulocyte"
     intron          <1. .19
                     /number=1
     CDS             <20. .>283
                     /codon_start=3
                     /label=exon_2
                     /product="MHC HLA DPB1"
                     /protein_id="AAA36266.1"
                     /db_xref="GI:553571"
                     /translation="NYVYQLRQECYAFNGTQRFLERYIYNREELVRFDSDVGEFRAVT
                     ELGRPEAEYWNSQKDILEEKRAVPDRMCRHNYELDEAVTLQRR"
     intron          284. .>285
                     /number=2

  Query Match              0.7%;  Score 19.8;  DB 1;  Length 285;
  Best Local Similarity   51.7%;  Pred. No. 1.4e+02;
  Matches   45;  Conservative    0;  Mismatches   42;  Indels    0;  Gaps    0;

Qy        292 AGGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCAGGCCCAATGA 351
              ||| | ||    |||| |||| | |    | ||     ||| || |||||  ||    |
Db        170 AGGCGGAGTACTGGAACAGCCAGAAGGACATCCTGGAGGAGAAGCGGGCAGTGCCGGACA 229

Qy        352 TCATGTGGTCAGTCCCCTGGGTACAGG 378
              |||||   |  |  ||  |  | ||
Db        230 GGATGTGCAGACACAACTACGAGCTGG 256


RESULT 172
BD095271/c
LOCUS       BD095271                 384 bp    DNA     linear   PAT 27-AUG-2002
DEFINITION  Structural coordinate and NMR chemical shift of protein and
            utilization thereof.
ACCESSION   BD095271
VERSION     BD095271.1  GI:22640859
KEYWORDS    WO 0142453-A/3.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 384)
  AUTHORS   Koda,D., Hiroaki,H. and Sumimoto,H.
  TITLE     Structural coordinate and NMR chemical shift of protein and
            utilization thereof
  JOURNAL   Patent: WO 0142453-A 3 14-JUN-2001;
            BIOMOLECULAR ENGINEERING RESEARCH INSTITUTE,DAISUKE KODA, HIDEKAZU
            HIROAKI, HIDEKI SUMIMOTO
COMMENT     OS   Homo sapiens (human)
            PN   WO 0142453-A/3
            PD   14-JUN-2001
            PF   01-DEC-2000 WO 2000JP008501
            PR   06-DEC-1999 JP 99P   346193
            PI   DAISUKE KODA,HIDEKAZU HIROAKI,HIDEKI SUMIMOTO PC
            C12N15/09,C12N9/02,G06F17/30,G06F17/50,G01N33/68,G01N24/02 CC
            Structural coordinate and NMR chemical shift of protein and  CC
                  utilization
            CC   thereof
            FH   Key             Location/Qualifiers
            FT   source          1. .336
            FT                   /organism='Homo sapiens (human)'.
FEATURES             Location/Qualifiers
     source          1. .384
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"

  Query Match              0.7%;  Score 19.8;  DB 1;  Length 384;
  Best Local Similarity   77.4%;  Pred. No. 1.4e+02;
  Matches   24;  Conservative    0;  Mismatches    7;  Indels    0;  Gaps    0;

Qy       2122 TAGGAAATTTTTCTTTTTTGGTTTTCTTGAA 2152
              |||| ||  ||||||||  ||||||| | |||
Db        178 TAGGGAACATTTCTTTTAAGGTTTTATGGAA 148


RESULT 173
AX814618/c
LOCUS       AX814618                 394 bp    DNA     linear   PAT 05-DEC-2003
DEFINITION  Sequence 56 from Patent WO03064641.
ACCESSION   AX814618
VERSION     AX814618.1  GI:39103831
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Bougueleret,L., Niknejad,A. and Saudrais,C.
  TITLE     Gene encoding serine proteases
  JOURNAL   Patent: WO 03064641-A 56 07-AUG-2003;
            Geneprot, Inc. (CH)
FEATURES             Location/Qualifiers
     source          1. .394
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"
     misc_feature    1. .394
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/note="exon 14"

Query Match 0.7%; Score 19.8; DB 1; Length 394;
Best Local Similarity 60.0%; Pred. No. 1.4e+02;
Matches 33; Conservative 0; Mismatches 22; Indels 0; Gaps 0;

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Qy       1597 GTGTGTGTGTGTGTGTGTCTGTGTCTGTGTCTTGTGTGTCTGTGTTCTCTCCCCT 1651
              ||   || |||||||||   |  || | | | | ||    ||   ||| ||||||
Db        391 GTAGCTGGGTGTGTGTGGTGGCCTCCGGGGCGTCTGGAAATGGCGTCTGTCCCCT 337
```

RESULT 174
AX277349/c
LOCUS AX277349 439 bp DNA linear PAT 29-OCT-2001
DEFINITION Sequence 7 from Patent WO0174897.
ACCESSION AX277349
VERSION AX277349.1 GI:16548914
KEYWORDS .
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Vernet,C.A., Burgess,C.E., Fernandes,E., Taupier,R.J., Quinn,K.E.,
Spytek,K.A., Rastelli,L. and Herrmann,J.L.
TITLE Novel proteins and nucleic acids encoding same
JOURNAL Patent: WO 0174897-A 7 11-OCT-2001;
Curagen Corporation (US)
FEATURES Location/Qualifiers
source 1. .439
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
CDS <2. .295
/note="unnamed protein product"
/codon_start=1
/protein_id="CAD10333.1"
/db_xref="GI:16548915"
/db_xref="REMTREMBL:CAD10333"
/translation="HGNKPGPVPLISNKICNHRDVYGGIISPSMLCAGYLTGGVDSCQ
GDSGGPLVCQERRLWKLVGATSFGIGCAEVNKPGVYTVSPPSWTGSTSRWRET"

Query Match 0.7%; Score 19.8; DB 1; Length 439;
Best Local Similarity 57.1%; Pred. No. 1.5e+02;
Matches 36; Conservative 0; Mismatches 27; Indels 0; Gaps 0;

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Qy        223 GTGTTTCAGGGGGTCCCTCTTTCTCCAATTGATGCAATTGGAGGCTATGGCTCCTTTGAT 282
              ||||| |     | ||| |    || || ||    ||  | |  ||||| |  ||||    || ||
Db        402 GTGTCTGCTCGTGTGCAGGTTCCTACACGGGAGTCCAGGGGAGGATCGGGCTGTCTTCAT 343

Qy        283 CAC 285
              |||
Db        342 CAC 340
```

RESULT 175
AX277375/c
LOCUS AX277375 439 bp DNA linear PAT 29-OCT-2001
DEFINITION Sequence 33 from Patent WO0174897.
ACCESSION AX277375
VERSION AX277375.1 GI:16548940
KEYWORDS .
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Vernet,C.A., Burgess,C.E., Fernandes,E., Taupier,R.J., Quinn,K.E.,
Spytek,K.A., Rastelli,L. and Herrmann,J.L.
TITLE Novel proteins and nucleic acids encoding same
JOURNAL Patent: WO 0174897-A 33 11-OCT-2001;
Curagen Corporation (US)
FEATURES Location/Qualifiers
source 1. .439
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.7%; Score 19.8; DB 1; Length 439;
Best Local Similarity 57.1%; Pred. No. 1.5e+02;
Matches 36; Conservative 0; Mismatches 27; Indels 0; Gaps 0;

```
Qy        223 GTGTTTCAGGGGGTCCCTCTTTCTCCAATTGATGCAATTGGAGGCTATGGCTCCTTTGAT 282
              ||||| |     | ||| |    || || ||    ||  | |  ||||| |  ||||    || ||
Db        402 GTGTCTGCTCGTGTGCAGGTTCCTACACGGGAGTCCAGGGGAGGATCGGGCTGTCTTCAT 343

Qy        283 CAC 285
              |||
Db        342 CAC 340
```

RESULT 176
DLA6882
LOCUS DLA6882 535 bp mRNA linear VRT 12-OCT-1998
DEFINITION Dicentrarchus labrax mRNA for trypsin, partial.
ACCESSION AJ006882
VERSION AJ006882.1 GI:3228220
KEYWORDS trypsin.
SOURCE Dicentrarchus labrax (European sea bass)
ORGANISM Dicentrarchus labrax
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes;
Percoidei; Moronidae; Dicentrarchus.
REFERENCE 1
AUTHORS Peres,A., Zambonino Infante,J.L. and Cahu,C.L.
TITLE Dietary regulation of activities and mRNA levels of trypsin and
amylase in sea bass (Dicentrarchus labrax) larvae
JOURNAL Fish Physiol. Biochem. 19, 145-152 (1998)
REFERENCE 2 (bases 1 to 535)
AUTHORS Zambonino Infante,J.L.
TITLE Direct Submission
JOURNAL Submitted (11-JUN-1998) Zambonino Infante J.L., Unite Mixte
Inra-Ifremer de Nutrition des Poissons, Ifremer, BP 70, 29280
Plouzane, FRANCE
FEATURES Location/Qualifiers
source 1. .535
/organism="Dicentrarchus labrax"
/mol_type="mRNA"
/db_xref="taxon:13489"
/dev_stage="larvae"
CDS <1. .>535
/EC_number="3.4.21.4"
/codon_start=1
/product="trypsin"
/protein_id="CAA07315.1"
/db_xref="GI:3242120"
/db_xref="GOA:O93594"
/db_xref="SPTREMBL:O93594"
/translation="QVSLNSGYHFCGGSLVNENWVVSAAHCYKSRVEVRLGEHNIRVT
ENTEQFISSSRVIRHPRYSSYNIDNDIMLIKLSKPATLNQYVQPVALPTSCAPAGTMC
TVSGWGNTMSSTADRNKLQCLNIPILSFKDCDNSYPGMITDAMFCAGYLEGGKDSCQG
DSGGPVVCNGELQGVVSW"

Query Match 0.7%; Score 19.8; DB 1; Length 535;
Best Local Similarity 54.9%; Pred. No. 1.5e+02;
Matches 39; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

```
Qy        489 TGGTAGAGTATCTCATACAGAGGATAGCACTAGATGCTGTCTGGGACATAGGTAAGCTTT 548
              ||| |  |  || || |  |    || || ||| ||    ||||  | | |  |||
Db        414 TGGCATGATCACTGATGCTATGTTCTGCGCTGGATACTTGGAGGGAGGCAAGGACTCTTG 473

Qy        549 CCAGAGAGACT 559
              |||| | ||||
Db        474 CCAGGGTGACT 484
```

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RESULT 177
BV036036
LOCUS       BV036036                556 bp    DNA     linear   STS 31-MAY-2003
DEFINITION  S212P6822FB7.T0 CZECHII/Ei Mus musculus STS genomic, sequence
            tagged site.
ACCESSION   BV036036
VERSION     BV036036.1  GI:31119931
KEYWORDS    STS.
SOURCE      Mus musculus (house mouse)
  ORGANISM  Mus musculus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE   1  (bases 1 to 556)
  AUTHORS   Wade,C.M., Kulbokas,E.J. III, Kirby,A.W., Zody,M.C., Mullikin,J.C.,
            Lander,E.S., Lindblad-Toh,K. and Daly,M.J.
  TITLE     The mosaic structure of variation in the laboratory mouse genome
  JOURNAL   Nature 420 (6915), 574-578 (2002)
  MEDLINE   22354684
   PUBMED   12466852
COMMENT
            Contact: Kerstin Lindblad-Toh
            Whitehead Institute for Biomedical Research, Center for Genome
            Research
            320 Charles Street, Cambridge, MA 02141, USA
            Tel: 6172521477
            Fax: 6172580903
            Email: kersli@genome.wi.mit.edu
            Primer A: None
            Primer B: None
            STS size: 556
            Protocol:
            WGS-discovery: Paired-end low-coverage whole genome shotgun reads
            were generated from 129S1/SvImJ, C3H/HeJ, and BALB/cByJ. The WGS
            reads were placed uniquely on the MGSCv3 C57BL/6J assembly and SNP
            detection was carried out by SSAHA-SNP. 225,000 reads were
            annotated
            as STSs and 81,000 SNPs were annotated with alleles from C57BL/6J
            and the strain from which the particular read came. The validation
            rate for these SNPs was estimated at approximately 98%.
FEATURES              Location/Qualifiers
     source           1. .556
                      /organism="Mus musculus"
                      /mol_type="genomic DNA"
                      /strain="CZECHII/Ei"
                      /db_xref="taxon:10090"
                      /map="- 8 22-490 13020709-13020240"
                      /clone_lib="CZECHII/Ei"
     STS              <1. .>556

  Query Match             0.7%;  Score 19.8;  DB 1;  Length 556;
  Best Local Similarity   69.2%;  Pred. No. 1.5e+02;
  Matches   27;  Conservative    0;  Mismatches   12;  Indels    0;  Gaps    0;

Qy       2308 CTGCCTGAGATTCTCTCTTCTATCTCTTGTATTCTGTCA 2346
              ||||  ||| |||| | |||||   |  |||||||  ||
Db        346 CTGCTGGAGTTTCTTTTTTCTACAACAGGTATTCTCCCA 384


RESULT 178
PIGFIXA/c
LOCUS       PIGFIXA                 813 bp    mRNA    linear   MAM 27-APR-1993
DEFINITION  Pig factor IX mRNA, partial cds.
ACCESSION   M26235
VERSION     M26235.1  GI:164450
KEYWORDS    factor IX.
SOURCE      Sus scrofa (pig)
  ORGANISM  Sus scrofa
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
REFERENCE   1  (bases 1 to 813)
  AUTHORS   Sarkar,G., Koeberl,D.D. and Sommer,S.S.
  TITLE     Direct sequencing of the activation peptide and the catalytic
            domain of the factor IX gene in six species
  JOURNAL   Genomics 6 (1), 133-143 (1990)
  MEDLINE   90152675
   PUBMED   2303254
COMMENT     Original source text: Pig liver, cDNA to mRNA.
            Draft entry and computer-readable sequence for [1] kindly provided
            by G.Sarkar, 18-JUL-1989.
FEATURES              Location/Qualifiers
     source           1. .813
                      /organism="Sus scrofa"
                      /mol_type="mRNA"
                      /db_xref="taxon:9823"
     CDS              <1. .>813
                      /note="factor IX"
                      /codon_start=1
                      /protein_id="AAA31031.1"
                      /db_xref="GI:164451"
                      /translation="SHSPTTLTRAEIIFSNMDYENSTEVEPILDSLTESNQSSDDFIR
                      IVGGENAKPGQFPWQVLLNGKIDAFCGGSIINEKWVVTAAHCIEPGVKITVVAGEYNT
                      EETEPTEQRRNVIRAIPHHSYNATVNKYSHDIALLELDEPLTLNSYVTPICIADKEYT
                      NIFLKFGSGYVSGWGRVFNRGRSATILQYLKVPLVDRATCLRSTKVTIYSNMFCAGFH
                      EGGKDSCLGDSGGPHVTEVEGTSFLTGIISWGEECAVKGKYGIYTKVSRYVNW"

  Query Match             0.7%;  Score 19.8;  DB 1;  Length 813;
  Best Local Similarity   49.5%;  Pred. No. 1.5e+02;
  Matches   51;  Conservative    0;  Mismatches   52;  Indels    0;  Gaps    0;

Qy        734 TCTTGATTTCTATCTTGGCTCATTTTTAACTCAGTAGTGAGTTGTTTGGTTTCCATAAGT 793
              | | |  || | ||      || ||  ||   ||| || || || |||||| |  | |||
Db        156 TTTGGCGTTTTCTCCACCAACAATTCGAATAAAGTCGTCAGATGATTGGTTGCTTTCAGT 97

Qy        794 TTGTAAGTTTTCTGTTGTTTCTGTTGTTGTTGTTGTTATCTAG 836
              |  |      ||| |||   |   || |   ||   |||
Db         96 GAGGCTATCCAAAATTGGTTCAACTTCAGTAGAATTTTCATAG 54


RESULT 179
HUMCFIX/c
LOCUS       HUMCFIX                 873 bp    mRNA    linear   PRI 01-NOV-1994
DEFINITION  Human coagulation factor IX mRNA, partial cds.
ACCESSION   M35672
VERSION     M35672.1  GI:180287
KEYWORDS    coagulation factor IX; serine protease.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 873)
  AUTHORS   Jagadeeswaran,P., Lavelle,D.E., Kaul,R., Mohandas,T. and
            Warren,S.T.
  TITLE     Isolation and characterization of human factor IX cDNA:
            identification of Taq I polymorphism and regional assignment
  JOURNAL   Somat. Cell Mol. Genet. 10 (5), 465-473 (1984)
  MEDLINE   84300526
   PUBMED   6089357
COMMENT     Original source text: Human adult liver, cDNA to mRNA.
FEATURES              Location/Qualifiers
     source           1. .873
                      /organism="Homo sapiens"
                      /mol_type="mRNA"
                      /db_xref="taxon:9606"
                      /map="Xq26.3-q27.1"
     gene             1. .873
                      /gene="F9"
     CDS              <1. .>873
                      /gene="F9"
                      /note="coagulation factor IX"
                      /codon_start=1
                      /protein_id="AAA51981.1"
                      /db_xref="GI:180288"
                      /db_xref="GDB:G00-119-900"
                      /translation="NANKILNRPKRYNSGKLEEFVQGNLERECMEEKCSFEEAREVFE
                      NTERTTEFWKQYVDGDQCESNPCLNGGSCKDDINSYECWCPFGFEGKNCELDVTCNIK
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                    NGRCEQFCKNSADNKVVCSCTEGYRLAENQKSCEPAVPFPCGRVSVSQTSKLTRAETV
                    FPDVDYVNSTEAETILDNITQSTQSFNDFTRVVGGEDAKPGQFPWQVVLNGKVDAFCG
                    GSIVNEKWIVTAAHCVETGVKITVVAGEHNIEETEHTEQKRNVIRIIPHHNYNAAINK
                    YNHDIALLELDEPLV"

  Query Match              0.7%;  Score 19.8;  DB 1;  Length 873;
  Best Local Similarity   45.7%;  Pred. No. 1.5e+02;
  Matches   69;  Conservative    0;  Mismatches   82;  Indels    0;  Gaps    0;

Qy       2425 TTAATTCTATTTCCACTTTCAGGTCCTGAAATGTTTTACTCATTTTCCTCCCAGTATTTA 2484
              | |||  ||| | ||| | |     |||| ||| ||      || ||||  | ||||     |
Db        749 TCAATATTATGTTCACCTGCGACAACTGTAATTTTAACACCAGTTTCAACACAGTGGGCA 690

Qy       2485 CATTTTCATAGGTTTCTTTAATGGATTTATTCATTTCCTCTTCAAGGACCTTTTATGAAT 2544
                ||   |    | ||| ||  |           ||| |   | | | |   | |
Db        689 GCAGTTACAATCCATTTTTCATTAACGATAGAGCCTCCACAGAATGCATCAACTTTACCA 630

Qy       2545 TCATAAAATGTATGTTAAGGTCCTTGCCTTG 2575
              |   |||      ||  ||||   ||| | ||
Db        629 TTCAAAACAACCTGCCAAGGGAATTGACCTG 599


RESULT 180
MMU44795/c
LOCUS       MMU44795                1850 bp    mRNA    linear   ROD 23-MAY-1996
DEFINITION  Mus musculus coagulation factor VII (fVII) mRNA, complete cds.
ACCESSION   U44795
VERSION     U44795.1  GI:1184738
KEYWORDS    .
SOURCE      Mus musculus (house mouse)
  ORGANISM  Mus musculus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE   1  (bases 1 to 1850)
  AUTHORS   Idusogie,E., Rosen,E., Geng,J.P., Carmeliet,P., Collen,D. and
            Castellino,F.J.
  TITLE     Characterization of a cDNA encoding murine coagulation factor VII
  JOURNAL   Thromb. Haemost. 75 (3), 481-487 (1996)
  MEDLINE   96276538
   PUBMED   8701412
REFERENCE   2  (bases 1 to 1850)
  AUTHORS   Rosen,E.D., Idusogie,E., Carmeliet,P., Collen,D. and
            Castellino,F.J.
  TITLE     Direct Submission
  JOURNAL   Submitted (05-JAN-1996) Elliot D. Rosen, Chemistry, Univ. of Notre
            Dame, Notre Dame, IN 46556, USA
FEATURES             Location/Qualifiers
     source          1. .1850
                     /organism="Mus musculus"
                     /mol_type="mRNA"
                     /db_xref="taxon:10090"
                     /tissue_type="liver"
     gene            1. .1850
                     /gene="fVII"
     CDS             16. .1356
                     /gene="fVII"
                     /note="initiation of extrinsic pathway of blood
                     coagulation; serine protease"
                     /codon_start=1
                     /product="coagulation factor VII"
                     /protein_id="AAC52570.1"
                     /db_xref="GI:1184739"
                     /translation="MVPQAHGLLLLCFLLQLQGPLGTAVFITQEEAHGVLHRQRRANS
                     LLEELWPGSLERECNEEQCSFEEAREIFKSPERTKQFWIVYSDGDQCASNPCQNVGTC
                     QDHLKSYVCFCLLDFEGRNCEKSKNEQLICANENGDCDQYCRDHVGTKRTCSCHEDYT
                     LQPDEVSCKPKVEYPCGRIPVVEKRNSSSRQGRIVGGNVCPKGECPWQAVLKINGLLL
                     CGAVLLDARWIVTAAHCFDNIRYWGNITVVMGEHDFSEKDGDEQVRRVTQVIMPDKYI
                     RGKINHDIALLRLHRPVTFTDYVVPLCLPEKSFSENTLARIRFSRVSGWGQLLDRGAT
                     ALELMSIEVPRLMTQDCLEHAKHSSNTPKITENMFCAGYMDGTKDACKGDSGGPHATH
                     YHGTWYLTGVVSWGEGCAAIGHIGVYTRVSQYIDWLVRHMDSKLQVGVFRLPLL"
     polyA_site      1850
                     /gene="fVII"
                     /note="54 A nucleotides"

  Query Match              0.7%;  Score 19.8;  DB 1;  Length 1850;
  Best Local Similarity   69.2%;  Pred. No. 1.6e+02;
  Matches   27;  Conservative    0;  Mismatches   12;  Indels    0;  Gaps    0;

Qy       2308 CTGCCTGAGATTCTCTCTTCTATCTCTTGTATTCTGTCA 2346
              ||||  ||| |||| | |||||    |  |||||||  ||
Db        581 CTGCTGGAGTTTCTTTTTTCTACAACAGGTATTCTCCCA 543


RESULT 181
G32113
LOCUS       G32113                  355 bp    DNA     linear   STS 19-AUG-1999
DEFINITION  F10-888 Domestic pigs (H.S.Sun) Sus scrofa STS genomic, sequence
            tagged site.
ACCESSION   G32113
VERSION     G32113.1  GI:2196477
KEYWORDS    STS.
SOURCE      Sus scrofa (pig)
  ORGANISM  Sus scrofa
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
REFERENCE   1  (bases 1 to 355)
  AUTHORS   Sun,H.S.
  TITLE     Comparative gene mapping between human and pigs
  JOURNAL   Unpublished (1996)
COMMENT
            Contact: Sun, H. S.
            Molecular genetics Laboratory, Department of Animal Science
            Iowa State University
            201 kildee Hall, Ames, IA 50011-3150
            Tel: 515-294-4209
            Fax: 515-294-2401
            Email: hssun@iastate.edu
            Primer A: ACCTACGACTTCGACATCGC
            Primer B: CGATGCCTGTCACGAAGTAG
            STS size: 355
            PCR Profile:
                  Presoak:            95 degree C for 3 minutes
                  Denaturation:     95 degree C for 0.5 minute
                  Annealing:         55 degree C for 1 minute
                  Polymerization: 72 degree C for 0.5 minutes
                  PCR cycles:       30
                  Thermal Cycler: M J Research
            Protocol:
                   Template: 30-100 ng
                   Primers: 0.3 uM
                   dNTPs: each 200 uM
                   Taq Polymerase: 0.033 units/ul
                   Total Vol: 15 ul

            Buffer:
                  MgCl2: 1.25 mM
                  KCl: 50 mM
                  Tris-HCl: 10 mM
                  pH: 8.3.
FEATURES             Location/Qualifiers
     source          1. .355
                     /organism="Sus scrofa"
                     /mol_type="genomic DNA"
                     /strain="Meishan"
                     /db_xref="taxon:9823"
                     /clone_lib="Domestic pigs (H.S.Sun)"
                     /note="Pig genomic DNA was prepared by standard
                     procedure."
     gene            1. .355
                     /gene="F10"
                     /note="Coagulation factor 10"
     STS             <1. .>355
                     /gene="F10"

  Query Match              0.7%;  Score 19.6;  DB 1;  Length 355;
  Best Local Similarity   56.1%;  Pred. No. 1.6e+02;
```

```
  Matches   37;  Conservative    0;  Mismatches   29;  Indels    0;  Gaps    0;

Qy         81 TGCACTGGGATGTTCAGATGTTCAGGTCTTGCTGTTGTAGAACCACCAGTTTCTGGTTGT 140
              ||    | ||   |   || | |   | || |    | || ||   | || | || | ||||   ||
Db        136 TGGCTTCGGGCGCACACACGAGCGGGGCCGCCCGTCGTCCACCCTCAAGATGCTGGAGGT 195

Qy        141 GCCATA 146
              |||  ||
Db        196 GCCCTA 201


RESULT 182
HAMCFX/c
LOCUS       HAMCFX                   484 bp    DNA     linear   ROD 05-FEB-1999
DEFINITION  Syrian hamster gene for coagulation factor X, partial cds.
ACCESSION   D21216
VERSION     D21216.1  GI:415304
KEYWORDS    coagulation factor X.
SOURCE      Mesocricetus auratus (golden hamster)
  ORGANISM  Mesocricetus auratus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;
            Mesocricetus.
REFERENCE   1  (bases 1 to 484)
  AUTHORS   Murakawa,M., Okamura,T., Kamura,T., Kuroiwa,M., Harada,M. and
            Niho,Y.
  TITLE     Analysis of the partial nucleotide sequences and deduced primary
            structures of the protease domains of mammalian blood coagulation
            factors VII and X
  JOURNAL   Eur. J. Haematol. 52 (3), 162-168 (1994)
  MEDLINE   94222160
   PUBMED   8168596
REFERENCE   2  (bases 1 to 484)
  AUTHORS   Murakawa,M.
  TITLE     Direct Submission
  JOURNAL   Submitted (18-OCT-1993) Masahiro Murakawa, Harasanshin General
            Hospital, Division of Hematology; 1-8 Taihaku-machi, Hakata-ku,
            Fukuoka, Fukuoka 812, Japan (Tel:092-291-3434, Fax:092-291-3266)
COMMENT     Submitted (18-Oct-1993) to DDBJ by:
            Masahiro Murakawa
            Division of Hemotology
            Harasanshin General Hospiral
            1-8 Taihaku-machi, Hakata-ku
            Fukuoka, Fukuoka 812
            Japan
            Phone: 092-291-3434
            Fax  : 092-291-3266.
FEATURES             Location/Qualifiers
     source          1. .484
                     /organism="Mesocricetus auratus"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:10036"
     CDS             <1. .>484
                     /codon_start=2
                     /product="coagulation factor X"
                     /protein_id="BAA04757.1"
                     /db_xref="GI:455393"
                     /translation="EGNEMTHEVDVVIKHNKFVRETYDFDIAVLRLKTPIIFRMNVAP
                     ACLPEKDWAEATLMTQKSGIVSGFGRTHEKGRQSHILKKLEVPYVDRNTCKLSTSFTI
                     TQNMFCAGYDAKPEDACQGDSGGPHVTRFKDTYFVTGIVSWGEGCARKGKYGIYTKVT
                     A"

  Query Match             0.7%;  Score 19.6;  DB 1;  Length 484;
  Best Local Similarity   50.0%;  Pred. No. 1.7e+02;
  Matches   49;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy       1176 ATTGTGTTTGGTGCATAGACATTAAGAATTGCAATGTCCTCTTGGTGGATTTTCCTTTGA 1235
              | | || | || |  |  |   | || |  || ||||    | || | | | |||  |
Db        114 AATATGATGGGGGTCTTCAGCCTGAGCACGGCGATGTCGAAGTCGTAGGTCTCCCTCACA 55

Qy       1236 TGCCTATGTAGTATTCTTCCCAATCTCATCTGCTTAGT 1273
                | | |   || || |  |||    || ||  |  ||
Db         54 AACTTGTTGTGTTTTATGACCACGTCCACCTCATGTGT 17


RESULT 183
AX193364
LOCUS       AX193364                 596 bp    DNA     linear   PAT 15-AUG-2001
DEFINITION  Sequence 931 from Patent WO0149716.
ACCESSION   AX193364
VERSION     AX193364.1  GI:15211315
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Xu,J., Lodes,M.J., Secrist,H., Benson,D.R., Meagher,M.J.,
            Stolk,J.A., King,G.E., Wang,T. and Jiang,Y.
  TITLE     Compounds for immunotherapy and diagnosis of colon cancer and
            methods for their use
  JOURNAL   Patent: WO 0149716-A 931 12-JUL-2001;
            CORIXA CORPORATION (US)
FEATURES             Location/Qualifiers
     source          1. .596
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.7%;  Score 19.6;  DB 1;  Length 596;
  Best Local Similarity   58.6%;  Pred. No. 1.7e+02;
  Matches   34;  Conservative    0;  Mismatches   24;  Indels    0;  Gaps    0;

Qy       1163 GAACTTGGGTGACATTGTGTTTGGTGCATAGACATTAAGAATTGCAATGTCCTCTTGG 1220
              ||  | | | || |  ||| | |||      ||  |  || | |||||||||  | |||
Db        122 GATGTAGCGGGAGAAGGTGATGGGTCTGCTGAGTTGGAGGAGTGCAATGTCGCCCTGG 179


RESULT 184
AX763043
LOCUS       AX763043                 609 bp    DNA     linear   PAT 25-JUN-2003
DEFINITION  Sequence 37 from Patent WO03040393.
ACCESSION   AX763043
VERSION     AX763043.1  GI:32257659
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Martinez,R.A. and Sigurdsson,G.T.
  TITLE     Nucleic acids encoding proteases
  JOURNAL   Patent: WO 03040393-A 37 15-MAY-2003;
            Decode Genetics EHF. (IS)
FEATURES             Location/Qualifiers
     source          1. .609
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.7%;  Score 19.6;  DB 1;  Length 609;
  Best Local Similarity   54.1%;  Pred. No. 1.7e+02;
  Matches   40;  Conservative    0;  Mismatches   34;  Indels    0;  Gaps    0;

Qy        871 ATTATTTCAATTGTCTTTTATCTGTCGAGACTTGCTTTGTTTTGAAATATGTATTCAATT 930
              |||||||     | | ||  |||   |          ||||||||   | || | ||| |||
Db        142 ATTATTTGCCATATATTAGATCATGCTGTGGCCCTTTTGTTTTTGCAAATTTCTTCCATT 201

Qy        931 TTGGAGAGTTTCAT 944
              | | |  |   |||
Db        202 TGGAATGGGAACAT 215


RESULT 185
AX675583/c
LOCUS       AX675583                 882 bp    DNA     linear   PAT 27-MAR-2003
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```
DEFINITION  Sequence 33 from Patent WO02055704.
ACCESSION   AX675583
VERSION     AX675583.1  GI:29333568
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Padigaru,M., Li,L., Zerhusen,B.D., Casman,S.J., Shenoy,S.,
            Spytek,K.A., Zhong,M., Gangolli,E.A., Burgess,C.E., Patturajan,M.,
            Vernet,C.A., Taylor,S., Tchernev,V.T., Miller,C.E., Guo,X.,
            Boldog,F.L., Grosse,W.M., Alsobrook,J.P., Gerlach,V.,
            Edingermark,S., Rothenberg,M.E., Ellerman,K., Macdougall,J.,
            Malyankar,U., Millet,I., Peyman,J., Smithson,G., Gunther,E. and
            Stone,D.J.
  TITLE     Proteins, polynucleotides encoding them and methods of using the
            same
  JOURNAL   Patent: WO 02055704-A 33 18-JUL-2002;
            Curagen Corporation (US)
FEATURES             Location/Qualifiers
     source          1. .882
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.7%;  Score 19.6;  DB 1;  Length 882;
  Best Local Similarity   58.6%;  Pred. No. 1.7e+02;
  Matches   34;  Conservative    0;  Mismatches   24;  Indels    0;  Gaps    0;

Qy       1163 GAACTTGGGTGACATTGTGTTTGGTGCATAGACATTAAGAATTGCAATGTCCTCTTGG 1220
             ||  | | | ||  |  ||| | |||      ||  |  || | |||||||||  | |||
Db        369 GATGTAGCGGGAGAGGGTGATGGGTCTGCTGAGTTGGAGGAGTGCAATGTCGCCCTGG 312


RESULT 186
AR219285/c
LOCUS       AR219285                1142 bp    DNA     linear   PAT 25-SEP-2002
DEFINITION  Sequence 8 from patent US 6420157.
ACCESSION   AR219285
VERSION     AR219285.1  GI:23320255
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 1142)
  AUTHORS   Darrow,A., Qi,J. and Andrade-Grodon,P.
  TITLE     Zymogen activation system
  JOURNAL   Patent: US 6420157-A 8 16-JUL-2002;
FEATURES             Location/Qualifiers
     source          1. .1142
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.7%;  Score 19.6;  DB 1;  Length 1142;
  Best Local Similarity   58.6%;  Pred. No. 1.8e+02;
  Matches   34;  Conservative    0;  Mismatches   24;  Indels    0;  Gaps    0;

Qy       1163 GAACTTGGGTGACATTGTGTTTGGTGCATAGACATTAAGAATTGCAATGTCCTCTTGG 1220
             ||  | | | ||  |  ||| | |||      ||  |  || | |||||||||  | |||
Db        456 GATGTAGCGGGAGAAGGTGATGGGTCTGCTGAGTTGGAGGAGTGCAATGTCGCCCTGG 399


RESULT 187
AX675581/c
LOCUS       AX675581                1161 bp    DNA     linear   PAT 27-MAR-2003
DEFINITION  Sequence 31 from Patent WO02055704.
ACCESSION   AX675581
VERSION     AX675581.1  GI:29333567
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Padigaru,M., Li,L., Zerhusen,B.D., Casman,S.J., Shenoy,S.,
            Spytek,K.A., Zhong,M., Gangolli,E.A., Burgess,C.E., Patturajan,M.,
            Vernet,C.A., Taylor,S., Tchernev,V.T., Miller,C.E., Guo,X.,
            Boldog,F.L., Grosse,W.M., Alsobrook,J.P., Gerlach,V.,
            Edingermark,S., Rothenberg,M.E., Ellerman,K., Macdougall,J.,
            Malyankar,U., Millet,I., Peyman,J., Smithson,G., Gunther,E. and
            Stone,D.J.
  TITLE     Proteins, polynucleotides encoding them and methods of using the
            same
  JOURNAL   Patent: WO 02055704-A 31 18-JUL-2002;
            Curagen Corporation (US)
FEATURES             Location/Qualifiers
     source          1. .1161
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.7%;  Score 19.6;  DB 1;  Length 1161;
  Best Local Similarity   58.6%;  Pred. No. 1.8e+02;
  Matches   34;  Conservative    0;  Mismatches   24;  Indels    0;  Gaps    0;

Qy       1163 GAACTTGGGTGACATTGTGTTTGGTGCATAGACATTAAGAATTGCAATGTCCTCTTGG 1220
             ||  | | | ||  |  ||| | |||      ||  |  || | |||||||||  | |||
Db        657 GATGTAGCGGGAGAAGGTGATGGGTCTGCTGAGTTGGAGGAGTGCAATGTCGCCCTGG 600


RESULT 188
AR219284/c
LOCUS       AR219284                1169 bp    DNA     linear   PAT 25-SEP-2002
DEFINITION  Sequence 7 from patent US 6420157.
ACCESSION   AR219284
VERSION     AR219284.1  GI:23320254
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 1169)
  AUTHORS   Darrow,A., Qi,J. and Andrade-Grodon,P.
  TITLE     Zymogen activation system
  JOURNAL   Patent: US 6420157-A 7 16-JUL-2002;
FEATURES             Location/Qualifiers
     source          1. .1169
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.7%;  Score 19.6;  DB 1;  Length 1169;
  Best Local Similarity   58.6%;  Pred. No. 1.8e+02;
  Matches   34;  Conservative    0;  Mismatches   24;  Indels    0;  Gaps    0;

Qy       1163 GAACTTGGGTGACATTGTGTTTGGTGCATAGACATTAAGAATTGCAATGTCCTCTTGG 1220
             ||  | | | ||  |  ||| | |||      ||  |  || | |||||||||  | |||
Db        483 GATGTAGCGGGAGAAGGTGATGGGTCTGCTGAGTTGGAGGAGTGCAATGTCGCCCTGG 426


RESULT 189
E62999
LOCUS       E62999                  1221 bp    DNA     linear   PAT 31-JAN-2002
DEFINITION  Hemocoagulation factor VII modification.
ACCESSION   E62999
VERSION     E62999.1  GI:18633641
KEYWORDS    JP 2001061479-A/3.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 1221)
  AUTHORS   Fukushima,K., Mizuguchi,J., Yuguchi,M., Nakagaki,T. and Iwanaga,S.
  TITLE     Hemocoagulation factor VII modification
  JOURNAL   Patent: JP 2001061479-A 3 13-MAR-2001;
            JURIDICAL FOUNDATION THE CHEMO SERO THERAPEUTIC RESEARCH INSTITUTE
COMMENT     OS   Artificial Sequence
            PN   JP 2001061479-A/3
```

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            PD   13-MAR-2001
            PF   24-AUG-1999 JP 1999237610
            PR
            PI   KENJI FUKUSHIMA,JUN MIZUGUCHI,MASATO YUGUCHI,TOMOHIRO
            NAKAGAKI,
            PI   SADAAKI IWANAGA
            PC   C12N15/09,A61K38/43,A61P7/04,C07K14/755,C12N9/76,C12N15/00, PC
              A61K37/465
            CC
            FH   Key             Location/Qualifiers
            FT   source          1. .1221
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .1221
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match              0.7%;  Score 19.6;  DB 1;  Length 1221;
  Best Local Similarity   46.4%;  Pred. No. 1.8e+02;
  Matches   64;  Conservative    0;  Mismatches   74;  Indels    0;  Gaps    0;

Qy        344 CCCAATGATCATGTGGTCAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAGAGATTGCC 403
              |||||  |   ||     |  |   | || |    | ||  | | | |  |  |   ||
Db        446 CCCAAGGCCGAATTGTGGGGGGCAAGGTGTGCCCCAAAGGGGAGGCCCCATGGCAGGTCC 505

Qy        404 TCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGTGGGGG 463
              | ||   |||| | | ||  |  | |    || |  | ||  || |    |    || ||
Db        506 TGTTGTTGGTGAATGGAGCTCAGTTGTGTGGGGGGACCCTGATCAACACCATCTGGGTGG 565

Qy        464 TCTGAGGCTCCAATGGTT 481
              |||  |   || |  |||
Db        566 TCTCCGCGGCCCACTGTT 583


RESULT 190
BOVPBC/c
LOCUS       BOVPBC                  1373 bp    mRNA    linear   MAM 27-APR-1993
DEFINITION  Bovine protein C mRNA.
ACCESSION   K02435
VERSION     K02435.1  GI:163486
KEYWORDS    autoprothrombin IIA; protein C; serine protease.
SOURCE      Bos taurus (cow)
  ORGANISM  Bos taurus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
            Bovidae; Bovinae; Bos.
REFERENCE   1  (bases 1 to 1373)
  AUTHORS   Long,G.L., Belagaje,R.M. and MacGillivray,R.T.
  TITLE     Cloning and sequencing of liver cDNA coding for bovine protein C
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 81 (18), 5653-5656 (1984)
  MEDLINE   85014826
   PUBMED   6091100
COMMENT     Original source text: Bovine liver, cDNA to mRNA, clones pBC-2 and
            pBC-7.
            The sequence reported in [1] included homopolymeric tails on the 5'
            and 3' ends (not shown here).
FEATURES             Location/Qualifiers
     source          1. .1373
                     /organism="Bos taurus"
                     /mol_type="mRNA"
                     /db_xref="taxon:9913"
     CDS             <1. .1370
                     /note="protein C prepropeptide"
                     /codon_start=3
                     /protein_id="AAA30685.1"
                     /db_xref="GI:163487"
                     /translation="TSLLLFVTIWGISSTPAPPDSVFSSSQRAHQVLRIRKRANSFLE
                     ELRPGNVERECSEEVCEFEEAREIFQNTEDTMAFWSKYSDGDQCEDRPSGSPCDLPCC
                     GRGKCIDGLGGFRCDCAEGWEGRFCLHEVRFSNCSAENGGCAHYCMEEEGRRHCSCAP
                     GYRLEDDHQLCVSKVTFPCGRLGKRMEKKRKTLKRDTNQVDQKDQLDPRIVDGQEAGW
                     GESPWQAVLLDSKKKLVCGAVLIHVSWVLTVAHCLDSRKKLIVRLGEYDMRRWESWEV
                     DLDIKEVIIHPNYTKSTSDNDIALLRLAKPATLSQTIVPICLPDSGLSERKLTQVGQE
                     TVVTGWGYRDETKRNRTFVLSFIKVPVVPYNACVHAMENKISENMLCAGILGDPRDAC
                     EGDSGGPMVTFFRGTWFLVGLVSWGEGCGRLYNYGVYTKVSRYLDWIYGHIKAQEAPL
                     ESQVP"
     sig_peptide     <1. .86
                     /note="protein C signal peptide"
     mat_peptide     117. .581
                     /product="protein C light chain"
     mat_peptide     588. .1367
                     /product="protein C inactive heavy chain"
     mat_peptide     630. .1367
                     /product="protein C active heavy chain"

  Query Match              0.7%;  Score 19.6;  DB 1;  Length 1373;
  Best Local Similarity   50.0%;  Pred. No. 1.8e+02;
  Matches   49;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy       2517 ATTTCCTCTTCAAGGACCTTTTATGAATTCATAAAATGTATGTTAAGGTCCTTGCCTTGT 2576
              || || |  |||  |   | |  | ||   ||   || ||| | |  ||||||    |
Db        895 ATGTCGTTGTCACTGGTGCTCTTGGTATAGTTAGGGTGGATGATGACCTCCTTGATGTCC 836

Qy       2577 GCTTCAGCTATGTTGCATTCTCAGGGCCTATTGTAATA 2614
                 ||  |      ||  || ||| |||   ||| |||
Db        835 AGGTCCACCTCCCAGCTCTCCCAGCGCCGCATGTCATA 798


RESULT 191
OCU49933
LOCUS       OCU49933                1558 bp    mRNA    linear   MAM 27-MAR-1996
DEFINITION  Oryctolagus cuniculus vitamin K-dependent protein C precursor mRNA,
            partial cds.
ACCESSION   U49933
VERSION     U49933.1  GI:1236620
KEYWORDS    .
SOURCE      Oryctolagus cuniculus (rabbit)
  ORGANISM  Oryctolagus cuniculus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
REFERENCE   1  (bases 1 to 1558)
  AUTHORS   Shen,L., He,X. and Dahlback,B.
  TITLE     Molecular cloning of rabbit vitamin K-dependent protein C and
            demonstration of its mRNA in the reproductive organs
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 1558)
  AUTHORS   Shen,L., He,X. and Dahlback,B.
  TITLE     Direct Submission
  JOURNAL   Submitted (26-FEB-1996) Lei Shen, Clincal Chemistry, Lund
            University, University Hospital, Malmo S-205 02, Sweden
FEATURES             Location/Qualifiers
     source          1. .1558
                     /organism="Oryctolagus cuniculus"
                     /mol_type="mRNA"
                     /db_xref="taxon:9986"
                     /tissue_type="liver"
                     /dev_stage="adult"
     CDS             <1. .1377
                     /codon_start=1
                     /product="vitamin K-dependent protein C precursor"
                     /protein_id="AAA92956.1"
                     /db_xref="GI:1236621"
                     /translation="IPDDVGYRNQKTASKEGVCVVSKCQDGPNTLPRAKRANSFLEEL
                     RPSSLERECVEEVCDLEEAKEIFQSVDDTLAFWYKYVDGDQCAALPSEHPCSSQCCGH
                     GTCADSIGGFSCQCHGGWEGSFCQYEVRFSNCSVDNGGCAHYCLEEEAGRSCSCAPGY
                     ELADDHLQCEPAVRFPCGRLGWKRIEKKRGNVKRDLEQVDEMDEVDPRLIDGKLTRRG
                     DSPWQVILLDSKKKLACGAVLIHVSWVLTAAHCMEEPKKLFVRLGEYDLRRKERWELD
                     LNIQEVLIHPNYSRSTTDNDIALLRLAQPATLSQTIVPICLPDNGLAERELMQAGQET
                     VVTGWGYHSSRERKEAKRNRTFILNFITVPVAPQNECEQVMSNIISENMLCAGILGDRR
                     DACDGDSGGPMVASFRGTWFLVGLVSWGEGCGDLNNYGVYTKVSRYLDWIHSHIEEKE
                     AAPESPAP"
     sig_peptide     <1. .108
                     /note="putative; leader peptide"
     mat_peptide     109. .1374
                     /product="vitamin K-dependent protein C"
                     /note="putative"
```

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  Query Match             0.7%;  Score 19.6;  DB 1;  Length 1558;
  Best Local Similarity   58.6%;  Pred. No. 1.8e+02;
  Matches   34;  Conservative    0;  Mismatches   24;  Indels    0;  Gaps    0;

Qy        287 CCTCCAGGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCAGGC 344
              |||  ||||| |||| |||   |||  ||| ||    |    |||   |||||  | |
Db        435 CCTGGAGGAGGAGGCCGGGCGCAGCTGCAGCTGCGCCCCGGGCTATGAACTGGCGGAC 492


RESULT 192
AF272774
LOCUS       AF272774               2072 bp    mRNA    linear   PRI 07-FEB-2003
DEFINITION  Homo sapiens factor VII active site mutant immunoconjugate mRNA,
            complete cds.
ACCESSION   AF272774
VERSION     AF272774.2  GI:28269793
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 2072)
  AUTHORS   Hu,Z. and Garen,A.
  TITLE     Targeting tissue factor on tumor vascular endothelial cells and
            tumor cells for immunotherapy in mouse models of prostatic cancer
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 98 (21), 12180-12185 (2001)
  MEDLINE   21477448
   PUBMED   11593034
REFERENCE   2  (bases 1 to 2072)
  AUTHORS   Hu,Z. and Garen,A.
  TITLE     Direct Submission
  JOURNAL   Submitted (26-MAY-2000) Department of Molecular Biophysics and
            Biochemistry, Yale University, 266 Whitney Ave., New Haven, CT
            06520, USA
REFERENCE   3  (bases 1 to 2072)
  AUTHORS   Hu,Z. and Garen,A.
  TITLE     Direct Submission
  JOURNAL   Submitted (07-FEB-2003) Department of Molecular Biophysics and
            Biochemistry, Yale University, 266 Whitney Ave., New Haven, CT
            06520, USA
  REMARK    Sequence update by submitter
COMMENT     On Feb 7, 2003 this sequence version replaced gi:14279677.
FEATURES             Location/Qualifiers
     source          1. .2072
                     /organism="Homo sapiens"
                     /mol_type="mRNA"
                     /db_xref="taxon:9606"
     CDS             22. .2061
                     /note="hfVIIasm"
                     /codon_start=1
                     /product="factor VII active site mutant immunoconjugate"
                     /protein_id="AAK58686.2"
                     /db_xref="GI:28269794"
                     /translation="MVSQALRLLCLLLGLQGCLAAVFVTQEEAHGVLHRRRRANAFLE
                     ELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISYSDGDQCASSPCQNGGSCKDQ
                     LQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYCSDHTGTKRSCRCHEGYSLLA
                     DGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCPKGECPWQVLLLVNGAQLCGG
                     TLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDGDEQSRRVAQVIIPSTYVPGT
                     TNHDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFVRFSLVSGWGQLLDRGATALE
                     LMVLNVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSDGSKDSCAGDSGGPHATHYRG
                     TWYLTGIVSWGQGCATVGHFGVYTRVSQYIEWLQKLMRSEPRPGVLLRAPFPGSAEPK
                     SCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFN
                     WYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEK
                     TISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYK
                     TTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK"

  Query Match             0.7%;  Score 19.6;  DB 1;  Length 2072;
  Best Local Similarity   45.9%;  Pred. No. 1.7e+02;
  Matches   67;  Conservative    0;  Mismatches   79;  Indels    0;  Gaps    0;

Qy        336 CTGGCAGGCCCAATGATCATGTGGTCAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAG 395
              | |  || |||||  |   |  ||    |  |   | ||| |    | ||  |  | | |

Db        573 CAGCAAGCCCCAAGGGCGAATTGTGGGGGGCAAGGTGTGCCCCAAAGGGGAGTGTCCATG 632

Qy        396 AGATTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAA 455
              |   ||| ||   |||| | | ||  |  | |    || | |  | ||  || |    |
Db        633 GCAGGTCCTGTTGTTGGTGAATGGAGCTCAGTTGTGTGGGGGGACCCTGATCAACACCAT 692

Qy        456 GGTGGGGGTCTGAGGCTCCAATGGTT 481
                || |||||  |   || |  |||
Db        693 CTGGGTGGTCTCCGCGGCCCACTGTT 718


RESULT 193
AR109618
LOCUS       AR109618               177 bp    DNA     linear   PAT 14-FEB-2001
DEFINITION  Sequence 30 from patent US 6114139.
ACCESSION   AR109618
VERSION     AR109618.1  GI:12825894
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 177)
  AUTHORS   Hinuma,S., Hosoya,M., Fujii,R., Ohtaki,T., Fukusumi,S. and Ohgi,K.
  TITLE     G-protein coupled receptor protein and a DNA encoding the receptor
  JOURNAL   Patent: US 6114139-A 30 05-SEP-2000;
FEATURES             Location/Qualifiers
     source          1. .177
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.7%;  Score 19.4;  DB 1;  Length 177;
  Best Local Similarity   57.4%;  Pred. No. 1.7e+02;
  Matches   35;  Conservative    0;  Mismatches   26;  Indels    0;  Gaps    0;

Qy       2163 CTGCTTTTGACCTGCCTTCTTCCCCTTCCTCTATTCCTTTGGTTTTTGCATAGTGTCTCT 2222
              |||||  | |||| ||| || || || |  |  |||   || ||      | || ||
Db          7 CTGCTGGTCACCTACCTGCTCCCTCTGCTGGTCATCCTCCTGTCTTACGTCCGGGTGTCA 66

Qy       2223 G 2223
              |
Db         67 G 67


RESULT 194
AR150638
LOCUS       AR150638               177 bp    DNA     linear   PAT 08-AUG-2001
DEFINITION  Sequence 25 from patent US 6228984.
ACCESSION   AR150638
VERSION     AR150638.1  GI:15115229
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 177)
  AUTHORS   Hinuma,S., Habata,Y., Kawamata,Y., Hosoya,M., Fujii,R., Fukusumi,S.
            and Kitada,C.
  TITLE     Polypeptides their production and use
  JOURNAL   Patent: US 6228984-A 25 08-MAY-2001;
FEATURES             Location/Qualifiers
     source          1. .177
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.7%;  Score 19.4;  DB 1;  Length 177;
  Best Local Similarity   57.4%;  Pred. No. 1.7e+02;
  Matches   35;  Conservative    0;  Mismatches   26;  Indels    0;  Gaps    0;

Qy       2163 CTGCTTTTGACCTGCCTTCTTCCCCTTCCTCTATTCCTTTGGTTTTTGCATAGTGTCTCT 2222
              |||||  | |||| ||| || || || |  |  |||   || ||      | || ||
Db          7 CTGCTGGTCACCTACCTGCTCCCTCTGCTGGTCATCCTCCTGTCTTACGTCCGGGTGTCA 66

Qy       2223 G 2223
              |
```

```
Db         67 G 67


RESULT 195
E16187
LOCUS       E16187                    177 bp    DNA     linear   PAT 28-JUL-1999
DEFINITION  Partial sequence of cDNA encoding G protein-coupled receptor.
ACCESSION   E16187
VERSION     E16187.1  GI:5710870
KEYWORDS    JP 1998146192-A/11.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 177)
  AUTHORS   Hinuma,K., Habatake,Y., Kawamata,Y., Hosoya,M., Fujii,A.,
            Fukuzumi,M. and Kitada,C.
  TITLE     NEW PHYSIOLOGICALLY ACTIVE SUBSTANCE, ITS PRODUCTION AND USE
  JOURNAL   Patent: JP 1998146192-A 11 02-JUN-1998;
            TAKEDA CHEM IND LTD
COMMENT     OS   Homo sapiens (human)
            PN   JP 1998146192-A/11
            PD   02-JUN-1998
            PF   26-DEC-1996 JP 1996348328
            PR   28-DEC-1995 JP 95P   343371, 15-MAR-1996 JP 96P    59419, PR
            12-AUG-1996 JP 96P   211805, 18-SEP-1996 JP 96P   246573 PI
            HINUMA KUNIJI, HABATAKE YUUGO, KAWAMATA YUJI, HOSOYA MASAKI, PI
            FUJII AKIRA,
            PI   FUKUZUMI MASASHI, KITADA CHIEKO
            PC   C12N15/09,A61K31/70,A61K31/70,A61K31/70,A61K31/70,A61K31/70,
            PC   A61K31/70,
            PC   A61K35/76,A61K38/00,A61K48/00,C07H21/00,C07K14/47,C12N5/10, PC
              C12P21/02,
            PC   C12Q1/02,G01N33/566,(C12N5/10,C12R1:91),(C12P21/02,C12R1:91);
            CC   strandedness: Double;
            CC   topology: Linear;
            CC   hypothetical: No;
            CC   anti-sense: No;
            FH   Key             Location/Qualifiers
            FH
            FT   source          1. .177
            FT                   /organism='Homo sapiens'
            FT                   /tissue_type='pituitary gland'.
FEATURES             Location/Qualifiers
     source          1. .177
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"

  Query Match             0.7%;  Score 19.4;  DB 1;  Length 177;
  Best Local Similarity   57.4%;  Pred. No. 1.7e+02;
  Matches   35;  Conservative    0;  Mismatches   26;  Indels    0;  Gaps    0;

Qy       2163 CTGCTTTTGACCTGCCTTCTTCCCCTTCCTCTATTCCTTTGGTTTTTGCATAGTGTCTCT 2222
             ||||| | |||| ||| || || || | |  | ||||  || ||      | || ||
Db          7 CTGCTGGTCACCTACCTGCTCCCTCTGCTGGTCATCCTCCTGTCTTACGTCCGGGTGTCA 66

Qy       2223 G 2223
              |
Db         67 G 67


RESULT 196
E27213
LOCUS       E27213                    177 bp    DNA     linear   PAT 18-JUN-2001
DEFINITION  Novel physiologically active substance, process for producing the
            same and utilization thereof.
ACCESSION   E27213
VERSION     E27213.1  GI:13025230
KEYWORDS    JP 1999009286-A/4.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 177)
  AUTHORS   Shuji,H. and Shoji,F.
  TITLE     Novel physiologically active substance, process for producing the
            same and utilization thereof
  JOURNAL   Patent: JP 1999009286-A 4 19-JAN-1999;
            TAKEDA CHEM IND LTD
COMMENT     OS   Unidentified
            PN   JP 1999009286-A/4
            PD   19-JAN-1999
            PF   27-APR-1998 JP 1998117189
            PR
            PI   SHUJI HINUMA,SHOJI FUKUZUMI
            PC   C12N15/09,A01K67/027,A61K38/00,A61K38/00,C07K14/47,C07K16/18,
            PC   C12N1/21,
            PC   C12N5/10,C12P21/02,G01N33/53,G01N33/577//C12P21/08,(C12N15/09,
            PC   C12R1:91),
            PC   (C12N1/21,C12R1:19),(C12N5/10,C12R1:91),(C12P21/02,C12R1:19),
            PC   C12N15/00,
            PC   A61K37/02,A61K37/02,C12N5/00,(C12N15/00,C12R1:91),(C12N5/00,
            PC   C12R1:91)
            CC   Strandedness: Double;
            CC   Topology: Linear;
            FH   Key             Location/Qualifiers
            FT   source          1. .177
            FT                   /organism='Unidentified'.
FEATURES             Location/Qualifiers
     source          1. .177
                     /organism="unidentified"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32644"

  Query Match             0.7%;  Score 19.4;  DB 1;  Length 177;
  Best Local Similarity   57.4%;  Pred. No. 1.7e+02;
  Matches   35;  Conservative    0;  Mismatches   26;  Indels    0;  Gaps    0;

Qy       2163 CTGCTTTTGACCTGCCTTCTTCCCCTTCCTCTATTCCTTTGGTTTTTGCATAGTGTCTCT 2222
             ||||| | |||| ||| || || || | |  | ||||  || ||      | || ||
Db          7 CTGCTGGTCACCTACCTGCTCCCTCTGCTGGTCATCCTCCTGTCTTACGTCCGGGTGTCA 66

Qy       2223 G 2223
              |
Db         67 G 67


RESULT 197
E28271
LOCUS       E28271                    177 bp    DNA     linear   PAT 18-JUN-2001
DEFINITION  Utilization of peptide.
ACCESSION   E28271
VERSION     E28271.1  GI:13025305
KEYWORDS    JP 1999071300-A/11.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 177)
  AUTHORS   Shuji,H., Ryo,F., Yuji,K. and Hirokazu,M.
  TITLE     Utilization of peptide
  JOURNAL   Patent: JP 1999071300-A 11 16-MAR-1999;
            TAKEDA CHEM IND LTD
COMMENT     OS   Unidentified
            PN   JP 1999071300-A/11
            PD   16-MAR-1999
            PF   22-JUN-1998 JP 1998175007
            PR
            PI   SHUJI HINUMA,RYO FUJII,YUJI KAWAMATA,HIROKAZU MATSUMOTO PC
            A61K38/00,A61K38/00,A61K38/00,A61K38/00,A61K38/00,A61K38/00, PC
            A61K38/00,
            PC   A61K38/00,A61K38/00,C07K7/08,C07K14/705//C12N15/09,C12P21/02,
            PC   (C12P21/02,C12R1:91),A61K37/02,A61K37/02,A61K37/02,A61K37/02,
            PC   A61K37/02,
            PC   A61K37/02,A61K37/02,A61K37/02,A61K37/02,C12N15/00 CC
            Strandedness: Double;
            CC   Topology: Linear;
```

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           FH   Key             Location/Qualifiers
           FT   source          1. .177
           FT                   /organism='Unidentified'.
FEATURES             Location/Qualifiers
     source          1. .177
                     /organism="unidentified"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32644"

  Query Match             0.7%;  Score 19.4;  DB 1;  Length 177;
  Best Local Similarity   57.4%;  Pred. No. 1.7e+02;
  Matches   35;  Conservative    0;  Mismatches   26;  Indels    0;  Gaps    0;

Qy       2163 CTGCTTTTGACCTGCCTTCTTCCCCTTCCTCTATTCCTTTGGTTTTTGCATAGTGTCTCT 2222
             |||||  | ||||  |||  ||  ||  ||  |    |  ||||    ||  ||       | ||  ||
Db          7 CTGCTGGTCACCTACCTGCTCCCTCTGCTGGTCATCCTCCTGTCTTACGTCCGGGTGTCA 66

Qy       2223 G 2223
              |
Db         67 G 67


RESULT 198
AR300928
LOCUS       AR300928                177 bp    mRNA    linear   PAT 12-JUN-2003
DEFINITION  Sequence 30 from patent US 6538107.
ACCESSION   AR300928
VERSION     AR300928.1  GI:31688601
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 177)
  AUTHORS   Hinuma,S., Ito,Y. and Fujii,R.
  TITLE     G protein coupled receptor protein production, and use thereof
  JOURNAL   Patent: US 6538107-A 30 25-MAR-2003;
FEATURES             Location/Qualifiers
     source          1. .177
                     /organism="unknown"
                     /mol_type="mRNA"

  Query Match             0.7%;  Score 19.4;  DB 1;  Length 177;
  Best Local Similarity   57.4%;  Pred. No. 1.7e+02;
  Matches   35;  Conservative    0;  Mismatches   26;  Indels    0;  Gaps    0;

Qy       2163 CTGCTTTTGACCTGCCTTCTTCCCCTTCCTCTATTCCTTTGGTTTTTGCATAGTGTCTCT 2222
             |||||  | ||||  |||  ||  ||  ||  |    |  ||||    ||  ||       | ||  ||
Db          7 CTGCTGGTCACCTACCTGCTCCCTCTGCTGGTCATCCTCCTGTCTTACGTCCGGGTGTCA 66

Qy       2223 G 2223
              |
Db         67 G 67


RESULT 199
AR109885
LOCUS       AR109885                204 bp    DNA     linear   PAT 14-FEB-2001
DEFINITION  Sequence 310 from patent US 6114139.
ACCESSION   AR109885
VERSION     AR109885.1  GI:12826161
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 204)
  AUTHORS   Hinuma,S., Hosoya,M., Fujii,R., Ohtaki,T., Fukusumi,S. and Ohgi,K.
  TITLE     G-protein coupled receptor protein and a DNA encoding the receptor
  JOURNAL   Patent: US 6114139-A 310 05-SEP-2000;
FEATURES             Location/Qualifiers
     source          1. .204
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.7%;  Score 19.4;  DB 1;  Length 204;
  Best Local Similarity   57.4%;  Pred. No. 1.7e+02;
  Matches   35;  Conservative    0;  Mismatches   26;  Indels    0;  Gaps    0;

Qy       2163 CTGCTTTTGACCTGCCTTCTTCCCCTTCCTCTATTCCTTTGGTTTTTGCATAGTGTCTCT 2222
             |||||  | ||||  |||  ||  ||  ||  |    |  ||||    ||  ||       | ||  ||
Db          7 CTGCTGGTCACCTACCTGCTCCCTCTGCTGGTCATCCTCCTGTCTTACGTCCGGGTGTCA 66

Qy       2223 G 2223
              |
Db         67 G 67


RESULT 200
AR150703
LOCUS       AR150703                204 bp    DNA     linear   PAT 08-AUG-2001
DEFINITION  Sequence 127 from patent US 6228984.
ACCESSION   AR150703
VERSION     AR150703.1  GI:15115294
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 204)
  AUTHORS   Hinuma,S., Habata,Y., Kawamata,Y., Hosoya,M., Fujii,R., Fukusumi,S.
            and Kitada,C.
  TITLE     Polypeptides their production and use
  JOURNAL   Patent: US 6228984-A 127 08-MAY-2001;
FEATURES             Location/Qualifiers
     source          1. .204
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.7%;  Score 19.4;  DB 1;  Length 204;
  Best Local Similarity   57.4%;  Pred. No. 1.7e+02;
  Matches   35;  Conservative    0;  Mismatches   26;  Indels    0;  Gaps    0;

Qy       2163 CTGCTTTTGACCTGCCTTCTTCCCCTTCCTCTATTCCTTTGGTTTTTGCATAGTGTCTCT 2222
             |||||  | ||||  |||  ||  ||  ||  |    |  ||||    ||  ||       | ||  ||
Db          7 CTGCTGGTCACCTACCTGCTCCCTCTGCTGGTCATCCTCCTGTCTTACGTCCGGGTGTCA 66

Qy       2223 G 2223
              |
Db         67 G 67


RESULT 201
AJ586104/c
LOCUS       AJ586104                249 bp    mRNA    linear   PLN 23-OCT-2003
DEFINITION  Lolium multiflorum partial mRNA for putative 4-coumarate coA ligase
            (4cl gene).
ACCESSION   AJ586104
VERSION     AJ586104.1  GI:37805458
KEYWORDS    4-coumarate coA ligase; 4cl gene.
SOURCE      Lolium multiflorum (Italian ryegrass)
  ORGANISM  Lolium multiflorum
            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
            Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
            Pooideae; Poeae; Lolium.
REFERENCE   1
  AUTHORS   Bettany,A.J.E. and Morris,P.
  TITLE     cDNA and genomic clones of Festuca arundinacea and Lolium
            multiflorum
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 249)
  AUTHORS   Bettany,A.J.E.
  TITLE     Direct Submission
  JOURNAL   Submitted (13-OCT-2003) Bettany A.J.E., Plant, Animal & Microbial
            Science, Inst. Grassland & Environmental Research, Plas Gogerddan,
            Aberystwyth, Ceredigion SY23 3EB, UNITED KINGDOM
FEATURES             Location/Qualifiers
     source          1. .249
                     /organism="Lolium multiflorum"
```

```
                     /mol_type="mRNA"
                     /cultivar="Trident"
                     /db_xref="taxon:4521"
                     /tissue_type="young leaves with leaf bases"
                     /dev_stage="seedlings"
     gene            1. .249
                     /gene="4cl"
     CDS             <1. .>249
                     /gene="4cl"
                     /EC_number="6.2.1.12"
                     /function="activation of thioester substrates for
                     phenylpropanoid synthesis"
                     /codon_start=3
                     /product="putative 4-coumarate coA ligase"
                     /protein_id="CAE51882.1"
                     /db_xref="GI:37805459"
                     /translation="PFKVKSGSCGTVVRNAELKVVDPDTGASLGRNQPGEICVRGKQI
                     MLGYLNDPESTKNTIDKDGWLHTGDIGLVDDDDEIFIV"

  Query Match             0.7%;  Score 19.4;  DB 1;  Length 249;
  Best Local Similarity   60.4%;  Pred. No. 1.8e+02;
  Matches   32;  Conservative    0;  Mismatches   21;  Indels    0;  Gaps    0;

Qy       2328 TATCTCTTGTATTCTGTCAGTGAGGCTTGTCTCTGAGGTTCCTGTTGGGTTCT 2380
                | ||||  || | | | |||     ||||||  ||  |||| || | |  |||
Db        210 TGTCTCCGGTGTGCAGCCAGCCGTCCTTGTCGATGGTGTTCTTGGTCGACTCT 158


RESULT 202
AX839191/c
LOCUS       AX839191                 290 bp    DNA     linear   PAT 15-DEC-2003
DEFINITION  Sequence 34 from Patent WO03076610.
ACCESSION   AX839191
VERSION     AX839191.1  GI:39922640
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Bracco,L., Brinkman,B. and Coignard,F.
  TITLE     Variants of human kallikrein-2 and kallikrein-3 and uses thereof
  JOURNAL   Patent: WO 03076610-A 34 18-SEP-2003;
            Exonhit Therapeutics S.A. (FR)
FEATURES             Location/Qualifiers
     source          1. .290
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.7%;  Score 19.4;  DB 1;  Length 290;
  Best Local Similarity   55.1%;  Pred. No. 1.8e+02;
  Matches   38;  Conservative    0;  Mismatches   31;  Indels    0;  Gaps    0;

Qy        653 TCTCTCTCTCCCTTTCTCTAACACTTCTGGGCCAGGGTAGGGGCACTACCGCATTCCCTC 712
              |||| | |||||   |||  ||| | |  | |  |   |||||  |  |  || |||
Db        113 TCTCGCACTCCCAGCCTCCCACAATCCGAGACAGGATGAGGGGTGCAGCACCAATCCACG 54

Qy        713 TCTCTTCCA 721
              || |   ||
Db         53 TCACGGACA 45


RESULT 203
HUMPS02
LOCUS       HUMPS02                  352 bp    DNA     linear   PRI 10-JAN-1995
DEFINITION  Human S protein-alpha (PS-alpha) gene, exon 2.
ACCESSION   M57841 J02917
VERSION     M57841.1  GI:190535
KEYWORDS    S protein; anticoagulant cofactor; vitamin K-dependent protein.
SEGMENT     2 of 14
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 352)
  AUTHORS   Schmidel,D.K., Tatro,A.V., Phelps,L.G., Tomczak,J.A. and Long,G.L.
  TITLE     Organization of the human protein S genes
  JOURNAL   Biochemistry 29 (34), 7845-7852 (1990)
  MEDLINE   91084444
   PUBMED   2148110
COMMENT     Original source text: Human liver DNA.
FEATURES             Location/Qualifiers
     source          1. .352
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"
                     /map="3p11-q11.2"
                     /tissue_type="liver"
     sig_peptide     join(M57840.1:837. .912,135. .181)
                     /gene="PS-alpha"
     intron          order(M57840.1:913. .1014,1. .134)
                     /gene="PROS1"
                     /number=1
     exon            135. .292
                     /gene="PROS1"
                     /note="G00-120-721"
                     /number=2

  Query Match             0.7%;  Score 19.4;  DB 1;  Length 352;
  Best Local Similarity   55.1%;  Pred. No. 1.8e+02;
  Matches   38;  Conservative    0;  Mismatches   31;  Indels    0;  Gaps    0;

Qy       1757 AAGATAGATATTCTTTACATCTGATTTTATCTTAGAATGTCTTTCTTTCTCCAACTATTG 1816
              || |||  |    |  | |  |||||    || || ||  |  || ||||    | | |||
Db         80 AATATATTTTACATGGAAAAATGATTAATTCATATAAACTGATTGTTTCCTTCAGTTTTG 139

Qy       1817 TGACAGAAA 1825
              | | || ||
Db        140 TCAAAGCAA 148


RESULT 204
DOGA2/c
LOCUS       DOGA2                    471 bp    DNA     linear   MAM 09-FEB-1999
DEFINITION  Dog gene for protein C (precursor of vitamin K-dependent serine
            protease), partial cds (catalytic region).
ACCESSION   D43751
VERSION     D43751.1  GI:601886
KEYWORDS    protein C; serine protease zymogen; vitamin K-dependent serine
            protease; blood coagulation-related.
SOURCE      Canis familiaris (dog)
  ORGANISM  Canis familiaris
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
REFERENCE   1  (bases 1 to 471)
  AUTHORS   Murakawa,M., Okamura,T., Kamura,T., Kuroiwa,M., Harada,M. and
            Niho,Y.
  TITLE     A comparative study of partial primary structures of the catalytic
            region of mammalian protein C
  JOURNAL   Br. J. Haematol. 86 (3), 590-600 (1994)
  MEDLINE   94318474
   PUBMED   8043441
REFERENCE   2  (bases 1 to 471)
  AUTHORS   Murakawa,M.
  TITLE     Direct Submission
  JOURNAL   Submitted (06-DEC-1994) Masahiro Murakawa, Harasanshin General
            Hospital, Division of Hematology; 1-8 Taihaku-machi, Hakata-ku,
            Fukuoka, Fukuoka 812, Japan (Tel:092-291-3434, Fax:092-291-3266)
FEATURES             Location/Qualifiers
     source          1. .471
                     /organism="Canis familiaris"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9615"
     CDS             <1. .>471
                     /function="regulation of blood coagulation"
```

```
                     /note="catalytic region"
                     /codon_start=1
                     /product="protein C"
                     /protein_id="BAA07808.1"
                     /db_xref="GI:1304048"
                     /translation="EKGEMDVDIKEVLIHPNYSKSTTDNDIALLHLAQPAIFSQTIVP
                     ICLPDSGLAERELTQVGQETVVTGWGYRSETKRNRTFVLNFINIPVAPHNECIQAMYN
                     MISENMLCAGILGDSRDACEGDSGGPMVTSFRGTWFLVGLVSWGEGCGRLHNYGI"

  Query Match             0.7%;  Score 19.4;  DB 1;  Length 471;
  Best Local Similarity   55.1%;  Pred. No. 1.9e+02;
  Matches   38;  Conservative    0;  Mismatches   31;  Indels    0;  Gaps    0;

Qy       1639 TGTTCTCTCCCCCTCTTTTGATTTTTGGCCTGGAATTATTTATTATTCATATTTTCTTGAA 1698
                ||||||| |  || | | |  |||||||||  | | ||| | |      | | |
Db        322 TGTTCTCAGATATCATGTTGTACATGGCCTGGATGCACTCATTGTGCGGGGCCACAGGGA 263

Qy       1699 TGTGGGTAA 1707
                ||| | |||
Db        262 TGTTGATAA 254


RESULT 205
SHPFIXA/c
LOCUS       SHPFIXA                   823 bp    mRNA    linear   MAM 27-APR-1993
DEFINITION  Sheep factor IX mRNA, partial cds.
ACCESSION   M26233
VERSION     M26233.1  GI:165878
KEYWORDS    factor IX.
SOURCE      Ovis aries (sheep)
  ORGANISM  Ovis aries
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
            Bovidae; Caprinae; Ovis.
REFERENCE   1  (bases 1 to 823)
  AUTHORS   Sarkar,G., Koeberl,D.D. and Sommer,S.S.
  TITLE     Direct sequencing of the activation peptide and the catalytic
            domain of the factor IX gene in six species
  JOURNAL   Genomics 6 (1), 133-143 (1990)
  MEDLINE   90152675
   PUBMED   2303254
COMMENT     Original source text: Sheep liver, cDNA to mRNA.
            Draft entry and computer-readable sequence for [1] kindly provided
            by G.Sarkar, 18-JUL-1989.
FEATURES             Location/Qualifiers
     source          1. .823
                     /organism="Ovis aries"
                     /mol_type="mRNA"
                     /db_xref="taxon:9940"
     CDS             <1. .>823
                     /note="factor IX"
                     /codon_start=1
                     /protein_id="AAA31520.1"
                     /db_xref="GI:552419"
                     /translation="RASVLHTSKKLTRAETIFSNMNYENSSEAEIIWDNVTQSNQSFD
                     DFNRVVGGEDAARGQFPWQVLLHGEIAAFCGGSIVNEKWVVTAAHCIKPGVKITVVAG
                     EHNTEKPEPTEQKRNVIRAIPYHGYNASINKYSHDIALLELDEPLELNSYVTPICIAD
                     REYTNIFLKFGYGYVSGWGRVFNRGRSASILQYLKVPLVDRATCLRSTKFTIYNHMFC
                     AGYHEGGKDSCQGDSGGPHVTEVEGTSFLTGIISWGEECAMKGKYGIYTKVSRYEV"

  Query Match             0.7%;  Score 19.4;  DB 1;  Length 823;
  Best Local Similarity   55.1%;  Pred. No. 2e+02;
  Matches   38;  Conservative    0;  Mismatches   31;  Indels    0;  Gaps    0;

Qy       2111 TTTCTCAAGGTTAGGAAATTTTTCTTTTTTGGTTTTCTTGAAAATATTTTCCCTGCTTTT 2170
                | | |||   | || | | ||||| |  ||  | ||    ||||| | ||     |
Db         93 TATTTCAGCTTCAGAAGAATTTTCATAGTTCATATTGGAAAAAATAGTCTCAGCACGGGT 34

Qy       2171 GACCTGCCT 2179
                || || | |
Db         33 GAGCTTCTT 25
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RESULT 206
BC061135/c
LOCUS       BC061135                  829 bp    mRNA    linear   ROD 25-NOV-2003
DEFINITION  Mus musculus trypsin 4, mRNA (cDNA clone MGC:74265 IMAGE:30306436),
            complete cds.
ACCESSION   BC061135
VERSION     BC061135.1  GI:38511692
KEYWORDS    MGC.
SOURCE      Mus musculus (house mouse)
  ORGANISM  Mus musculus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE   1  (bases 1 to 829)
  AUTHORS   Strausberg,R.L., Feingold,E.A., Grouse,L.H., Derge,J.G.,
            Klausner,R.D., Collins,F.S., Wagner,L., Shenmen,C.M., Schuler,G.D.,
            Altschul,S.F., Zeeberg,B., Buetow,K.H., Schaefer,C.F., Bhat,N.K.,
            Hopkins,R.F., Jordan,H., Moore,T., Max,S.I., Wang,J., Hsieh,F.,
            Diatchenko,L., Marusina,K., Farmer,A.A., Rubin,G.M., Hong,L.,
            Stapleton,M., Soares,M.B., Bonaldo,M.F., Casavant,T.L.,
            Scheetz,T.E., Brownstein,M.J., Usdin,T.B., Toshiyuki,S.,
            Carninci,P., Prange,C., Raha,S.S., Loqueliano,N.A., Peters,G.J.,
            Abramson,R.D., Mullahy,S.J., Bosak,S.A., McEwan,P.J.,
            McKernan,K.J., Malek,J.A., Gunaratne,P.H., Richards,S.,
            Worley,K.C., Hale,S., Garcia,A.M., Gay,L.J., Hulyk,S.W.,
            Villalon,D.K., Muzny,D.M., Sodergren,E.J., Lu,X., Gibbs,R.A.,
            Fahey,J., Helton,E., Ketteman,M., Madan,A., Rodrigues,S.,
            Sanchez,A., Whiting,M., Madan,A., Young,A.C., Shevchenko,Y.,
            Bouffard,G.G., Blakesley,R.W., Touchman,J.W., Green,E.D.,
            Dickson,M.C., Rodriguez,A.C., Grimwood,J., Schmutz,J., Myers,R.M.,
            Butterfield,Y.S., Krzywinski,M.I., Skalska,U., Smailus,D.E.,
            Schnerch,A., Schein,J.E., Jones,S.J. and Marra,M.A.
  TITLE     Generation and initial analysis of more than 15,000 full-length
            human and mouse cDNA sequences
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
  MEDLINE   22388257
   PUBMED   12477932
REFERENCE   2  (bases 1 to 829)
  AUTHORS   Strausberg,R.
  TITLE     Direct Submission
  JOURNAL   Submitted (03-NOV-2003) National Institutes of Health, Mammalian
            Gene Collection (MGC), Cancer Genomics Office, National Cancer
            Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
            USA
  REMARK    NIH-MGC Project URL: http://mgc.nci.nih.gov
COMMENT     Contact: MGC help desk
            Email: cgapbs-r@mail.nih.gov
            Tissue Procurement: Dr. Michael Brownstein
            cDNA Library Preparation: Michael Brownstein /  Ted Usdin
            Laboratory
            cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
            DNA Sequencing by: Sequencing Group at the Stanford Human Genome
            Center, Stanford University School of Medicine, Stanford, CA  94305
            Web site:       http://www-shgc.stanford.edu
            Contact:  (Dickson, Mark) mcd@paxil.stanford.edu
            Dickson, M., Schmutz, J., Grimwood, J., Rodriquez, A., and Myers,
            R. M.

            Clone distribution: MGC clone distribution information can be found
            through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
            Series: IRAL Plate: 53 Row: o Column: 2
            This clone was selected for full length sequencing because it
            passed the following selection criteria: matched mRNA gi: 6755892.
FEATURES             Location/Qualifiers
     source          1. .829
                     /organism="Mus musculus"
                     /mol_type="mRNA"
                     /db_xref="taxon:10090"
                     /clone="MGC:74265 IMAGE:30306436"
                     /tissue_type="Liver, mouse"
                     /clone_lib="NIH_MGC_177"
                     /lab_host="DH10B"
                     /note="Vector: pDNR-LIB"
     gene            1. .829
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                     /gene="Try4"
                     /note="synonyms: 0910001B19Rik, Tc"
                     /db_xref="LocusID:22074"
                     /db_xref="MGI:102757"
     CDS             14. .754
                     /codon_start=1
                     /product="trypsin 4"
                     /protein_id="AAH61135.1"
                     /db_xref="GI:38511693"
                     /db_xref="LocusID:22074"
                     /translation="MRALLFLALVGAAVAFPVDDDDKIVGGYTCRENSVPYQVSLNSG
                     YHFCGGSLINDQWVVSAAHCYKSRIQVRLGEHNINVLEGNEQFVNSAKIIKHPNFNSR
                     TLNNDIMLIKLASPVTLNARVATVALPSSCAPAGTQCLISGWGNTLSFGVNNPDLLQC
                     LDAPLLPQADCEASYPGKITNNMICVGFLEGGKDSCQGDSGGPVVCNGQLQGIVSWGY
                     GCALKDNPGVYTKVCNYVDWIQNTIAAN"
     misc_feature    83. .739
                     /note="Tryp_SPc; Region: Trypsin-like serine protease"
                     /db_xref="CDD:cd00190"

  Query Match             0.7%;  Score 19.4;  DB 1;  Length 829;
  Best Local Similarity   60.4%;  Pred. No. 2e+02;
  Matches   32;  Conservative    0;  Mismatches   21;  Indels    0;  Gaps    0;

Qy       2129 TTTTTCTTTTTTGGTTTTCTTGAAAATATTTTCCCTGCTTTTGACCTGCCTTC 2181
              ||||| |||||| |||||  |  ||||||  |  |  |        || ||||
Db        817 TTTTTTTTTTTTTTTTTTCGAGGGAATATTCACTTTATTGACATAATGACTTC 765


RESULT 207
AX375294
LOCUS       AX375294                1027 bp    DNA     linear   PAT 01-MAR-2002
DEFINITION  Sequence 1 from Patent WO0208392.
ACCESSION   AX375294
VERSION     AX375294.1  GI:19169986
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Xiao,Y.
  TITLE     Regulation of human matriptase-like serine protease
  JOURNAL   Patent: WO 0208392-A 1 31-JAN-2002;
            Bayer Aktiengesellschaft (DE)
FEATURES             Location/Qualifiers
     source          1. .1027
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.7%;  Score 19.4;  DB 1;  Length 1027;
  Best Local Similarity   51.8%;  Pred. No. 2e+02;
  Matches   44;  Conservative    0;  Mismatches   41;  Indels    0;  Gaps    0;

Qy        294 GAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCAGGCCCAATGATC 353
              || |  | || |    | |   | || ||||||  | | | |    |||| || ||
Db         42 GAACCCGGAGTGTGACGACCAGGAGGACTGCTCCGATGGGTCCGACGAGGCGCACTGCGA 101

Qy        354 ATGTGGTCAGTCCCCTGGGTACAGG 378
              |||||   |   ||||  |  |||
Db        102 GTGTGGCTTGCAGCCTGCCTGGAGG 126


RESULT 208
AR095306/c
LOCUS       AR095306                1126 bp    DNA     linear   PAT 08-SEP-2000
DEFINITION  Sequence 27 from patent US 6004555.
ACCESSION   AR095306
VERSION     AR095306.1  GI:10023064
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 1126)
  AUTHORS   Thorpe,P.E. and Edgington,T.S.
  TITLE     Methods for the specific coagulation of vasculature
  JOURNAL   Patent: US 6004555-A 27 21-DEC-1999;
FEATURES             Location/Qualifiers
     source          1. .1126
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.7%;  Score 19.4;  DB 1;  Length 1126;
  Best Local Similarity   47.9%;  Pred. No. 2e+02;
  Matches   56;  Conservative    0;  Mismatches   61;  Indels    0;  Gaps    0;

Qy         978 TTGGTGAAATAGTCTGTAAATATCTCTAGGTCCACTTGGTTTATGACATCAGTTAGCTCC 1037
               || |||||   ||        ||  | |  ||||| | ||  |   | |||     ||||
Db         596 TTTGTGAACCGGTTGTGCTTGATGACCACCTCCACCTCGTGCACCGCCTCACCGCCCTCC 537

Qy        1038 AGCATTTCTCTGTTTCGTTTTTTGTTGAGATGACCTAACTGTTGGAGAGAATGGGGT 1094
                 |   ||  |||| || |     | ||           || | |||| | |||| |
Db         536 TCCTGCTCCGTGTTCCGGTCCCCTTCGAATCTCTTGGCTTGGTAGAGACAGTGGGCT 480


RESULT 209
AR103990/c
LOCUS       AR103990                1126 bp    DNA     linear   PAT 14-FEB-2001
DEFINITION  Sequence 27 from patent US 6093399.
ACCESSION   AR103990
VERSION     AR103990.1  GI:12816698
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 1126)
  AUTHORS   Thorpe,P.E. and Edgington,T.S.
  TITLE     Methods and compositions for the specific coagulation of
            vasculature
  JOURNAL   Patent: US 6093399-A 27 25-JUL-2000;
FEATURES             Location/Qualifiers
     source          1. .1126
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.7%;  Score 19.4;  DB 1;  Length 1126;
  Best Local Similarity   47.9%;  Pred. No. 2e+02;
  Matches   56;  Conservative    0;  Mismatches   61;  Indels    0;  Gaps    0;

Qy         978 TTGGTGAAATAGTCTGTAAATATCTCTAGGTCCACTTGGTTTATGACATCAGTTAGCTCC 1037
               || |||||   ||        ||  | |  ||||| | ||  |   | |||     ||||
Db         596 TTTGTGAACCGGTTGTGCTTGATGACCACCTCCACCTCGTGCACCGCCTCACCGCCCTCC 537

Qy        1038 AGCATTTCTCTGTTTCGTTTTTTGTTGAGATGACCTAACTGTTGGAGAGAATGGGGT 1094
                 |   ||  |||| || |     | ||           || | |||| | |||| |
Db         536 TCCTGCTCCGTGTTCCGGTCCCCTTCGAATCTCTTGGCTTGGTAGAGACAGTGGGCT 480


RESULT 210
HUMFX/c
LOCUS       HUMFX                   1126 bp    mRNA    linear   PRI 08-NOV-1994
DEFINITION  Human factor X mRNA.
ACCESSION   K01886
VERSION     K01886.1  GI:182820
KEYWORDS    Stuart factor; factor X; serine protease.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 1126)
  AUTHORS   Leytus,S.P., Chung,D.W., Kisiel,W., Kurachi,K. and Davie,E.W.
  TITLE     Characterization of a cDNA coding for human factor X
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 81 (12), 3699-3702 (1984)
  MEDLINE   84222026
   PUBMED   6587384
COMMENT     Original source text: Human liver, cDNA to mRNA, clone
```

lambda-X-1137.
In processing, factor X (Stuart factor) is converted to Xa by cleavage of a glycopeptide from the amino-terminal end of the heavy chain. It then acts as a serine protease in converting prothrombin to thrombin.

```
FEATURES             Location/Qualifiers
     source          1. .1126
                     /organism="Homo sapiens"
                     /mol_type="mRNA"
                     /db_xref="taxon:9606"
                     /map="13q34"
     gene            1. .1126
                     /gene="F10"
     mRNA            <1. .1126
                     /gene="F10"
                     /product="factor X mRNA"
     CDS             <1. .1116
                     /gene="F10"
                     /note="factor X precursor peptide"
                     /codon_start=1
                     /protein_id="AAA52486.1"
                     /db_xref="GI:182821"
                     /db_xref="GDB:G00-119-890"
                     /translation="GFEGKNCELFTRKLCSLDNGDCDQFCHEEQNSVVCSCARGYTLA
                     DNGKACIPTGPYPCGKQTLERRKRSVAQATSSSGEAPDSITWKPYDAADLDPTENPFD
                     LLDFNQTQPERGDNNLTRIVGGQECKDGECPWQALLINEENEGFCGGTILSEFYILTA
                     AHCLYQAKRFEGDRNTEQEEGGEAVHEVEVVIKHNRFTKETYDFDIAVLRLKTPITFR
                     MNVAPACLPERDWAESTLMTQKTGIVSGFGRTHEKGRQSTRLKMLEVPYVDRNSCKLS
                     SSFIITQNMFCAGYDTKQEDACQGDSGGPHVTRFKDTYFVTGIVSWGEGCARKGKYGI
                     YTKVTAFLKWIDRSMKTRGLPKAKSHAPEVITSSPLK"
     mat_peptide     <1. .195
                     /gene="F10"
                     /product="factor X light chain"
     mat_peptide     205. .1113
                     /gene="F10"
                     /product="factor X heavy chain"
     mat_peptide     361. .1113
                     /gene="F10"
                     /product="factor Xa heavy chain"
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  Query Match              0.7%;  Score 19.4;  DB 1;  Length 1126;
  Best Local Similarity   47.9%;  Pred. No. 2e+02;
  Matches   56;  Conservative    0;  Mismatches   61;  Indels    0;  Gaps    0;

Qy        978 TTGGTGAAATAGTCTGTAAATATCTCTAGGTCCACTTGGTTTATGACATCAGTTAGCTCC 1037
              || |||||    ||        ||  | |  ||||| | ||  |   | |||      ||||
Db        596 TTTGTGAACCGGTTGTGCTTGATGACCACCTCCACCTCGTGCACCGCCTCACCGCCCTCC 537

Qy       1038 AGCATTTCTCTGTTTCGTTTTTTGTTGAGATGACCTAACTGTTGGAGAGAATGGGGT 1094
                |   ||  |||| || |     | ||           || | |||| | |||| |
Db        536 TCCTGCTCCGTGTTCCGGTCCCCTTCGAATCTCTTGGCTTGGTAGAGACAGTGGGCT 480
```

```
RESULT 211
AF321182/c
LOCUS       AF321182               1332 bp    mRNA    linear   PRI 26-DEC-2001
DEFINITION  Homo sapiens serine protease PRSS22 mRNA, complete cds.
ACCESSION   AF321182
VERSION     AF321182.1  GI:11386012
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 1332)
  AUTHORS   Wong,G.W., Yasuda,S., Madhusudhan,M.S., Li,L., Yang,Y.,
            Krilis,S.A., Sali,A. and Stevens,R.L.
  TITLE     Human tryptase epsilon (PRSS22), a new member of the chromosome
            16p13.3 family of human serine proteases expressed in airway
            epithelial cells
  JOURNAL   J. Biol. Chem. 276 (52), 49169-49182 (2001)
  MEDLINE   21623609
   PUBMED   11602603
```

```
REFERENCE   2  (bases 1 to 1332)
  AUTHORS   Wong,G.W.
  TITLE     Direct Submission
  JOURNAL   Submitted (14-NOV-2000) Rheumatology, Immunology and Allergy,
            Brigham and Women's Hospital, Harvard Medical School, 1 Jimmy Fund
            Way, Boston, MA 02115, USA
FEATURES             Location/Qualifiers
     source          1. .1332
                     /organism="Homo sapiens"
                     /mol_type="mRNA"
                     /db_xref="taxon:9606"
                     /chromosome="16"
                     /map="16p13.3"
                     /tissue_type="pancreas"
     CDS             18. .971
                     /codon_start=1
                     /product="serine protease PRSS22"
                     /protein_id="AAG35070.1"
                     /db_xref="GI:11386013"
                     /translation="MVVSGAPPALGGGCLGTFTSLLLLASTAILNAARIPVPPACGKP
                     QQLNRVVGGEDSTDSEWPWIVSIQKNGTHHCAGSLLTSRWVITAAHCFKDNLNKPYLF
                     SVLLGAWQLGNPGSRSQKVGVAWVEPHPVYSWKEGACADIALVRLERSIQFSERVLPI
                     CLPDASIHLPPNTHCWISGWGSIQDGVPLPHPQTLQKLKVPIIDSEVCSHLYWRGAGQ
                     GPITEDMLCAGYLEGERDACLGDSGGPLMCQVDGAWLLAGIISWGEGCAERNRPGVYI
                     SLSAHRSWVEKIVQGVQLRGRAQGGGALRAPSQGSGAAARS"
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  Query Match              0.7%;  Score 19.4;  DB 1;  Length 1332;
  Best Local Similarity   50.5%;  Pred. No. 2e+02;
  Matches   47;  Conservative    0;  Mismatches   46;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   |  | | | | | | | ||   ||
Db         96 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 37

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGG 491
              | |   | ||  |  | |||| || ||  | ||
Db         36 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGG 4
```

```
RESULT 212
A93124/c
LOCUS       A93124                 1404 bp    DNA     linear   PAT 22-JAN-2000
DEFINITION  Sequence 15 from Patent WO9747737.
ACCESSION   A93124
VERSION     A93124.1  GI:6741514
KEYWORDS    .
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 1404)
  AUTHORS   Kopetzki,E. and Hopfner,K.
  TITLE     RECOMBINANT BLOOD-COAGULATION PROTEASES
  JOURNAL   Patent: WO 9747737-A 15 18-DEC-1997;
            KOPETZKI ERHARD (DE); BOEHRINGER MANNHEIM GMBH (DE)
FEATURES             Location/Qualifiers
     source          1. .1404
                     /organism="unidentified"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32644"
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  Query Match              0.7%;  Score 19.4;  DB 1;  Length 1404;
  Best Local Similarity   47.9%;  Pred. No. 2e+02;
  Matches   56;  Conservative    0;  Mismatches   61;  Indels    0;  Gaps    0;

Qy        978 TTGGTGAAATAGTCTGTAAATATCTCTAGGTCCACTTGGTTTATGACATCAGTTAGCTCC 1037
              || |||||    ||        ||  | |  ||||| | ||  |   | |||      ||||
Db        884 TTTGTGAACCGGTTGTGCTTGATGACCACCTCCACCTCGTGCACCGCCTCACCGCCCTCC 825

Qy       1038 AGCATTTCTCTGTTTCGTTTTTTGTTGAGATGACCTAACTGTTGGAGAGAATGGGGT 1094
                |   ||  |||| || |     | ||           || | |||| | |||| |
Db        824 TCCTGCTCCGTGTTCCGGTCCCCTTCGAATCTCTTGGCTTGGTAGAGACAGTGGGCT 768
```

```
RESULT 213
HUMCFX/c
LOCUS       HUMCFX                  1414 bp    mRNA    linear   PRI 01-NOV-1994
DEFINITION  Human blood-coagulation factor X mRNA, complete cds.
ACCESSION   M22613
VERSION     M22613.1  GI:180335
KEYWORDS    coagulation factor X.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 1414)
  AUTHORS   Kaul,R.K., Hildebrand,B., Roberts,S. and Jagadeeswaran,P.
  TITLE     Isolation and characterization of human blood-coagulation factor X
            cDNA
  JOURNAL   Gene 41 (2-3), 311-314 (1986)
  MEDLINE   86221713
   PUBMED   3011603
COMMENT     Original source text: Human liver, cDNA to mRNA, clone pKT218.
FEATURES             Location/Qualifiers
     source          1. .1414
                     /organism="Homo sapiens"
                     /mol_type="mRNA"
                     /db_xref="taxon:9606"
                     /map="13q34"
     gene            1. .1414
                     /gene="F10"
     mRNA            <1. .1414
                     /gene="F10"
                     /product="coagulation factor X mRNA"
     CDS             <1. .1404
                     /gene="F10"
                     /note="coagulation factor X precursor"
                     /codon_start=1
                     /protein_id="AAA51984.1"
                     /db_xref="GI:180336"
                     /db_xref="GDB:G00-119-890"
                     /translation="LLGESLFIRREQANNILARVTRANSFLEEMKKGHLERECMEETC
                     SYEEAREVFEDSDKTNEFWNKYKDGDQCETSPCQNQGKCKDGLGEYTCTCLEGFEGKN
                     CELFTRKLCSLDNGDCDQFCHEEQNSVVCSCARGYTLADNGKACIPTGPYPCGKQTLE
                     RRKRSVAQATSSSGEAPDSITWKPYDAADLDPTENPFDLLDFNQTQPERGDNNLTRIV
                     GGQECKDGECPWQALLINEENEGFCGGTILSEFYILTAAHCLYQAKRFEGDRNTEQEE
                     GGEAVHEVEVVIKHNRFTKETYDFDIAVLRLKTPITFRMNVAPACLPERDWAESTLMT
                     QKTGIVSGFGRTHEKGRQSTRLKMLEVPYVDRNSCKLSSSFIITQNMFCAGYDTKQED
                     ACQGDSGGPHVTRFKDTYFVTGIVSWGEGCARKGKYGIYTKVTAFLKWIDRSMKTRGL
                     PKAKSHAPEVITSSPLK"
     sig_peptide     <1. .66
                     /gene="F10"
                     /note="coagulation factor X signal peptide"
     mat_peptide     67. .483
                     /gene="F10"
                     /product="coagulation factor X light chain"
     mat_peptide     493. .1401
                     /gene="F10"
                     /product="coagulation factor X heavy chain"
     mat_peptide     493. .648
                     /gene="F10"
                     /product="coagulation factor X activation peptide"

  Query Match             0.7%;  Score 19.4;  DB 1;  Length 1414;
  Best Local Similarity   47.9%;  Pred. No. 2e+02;
  Matches   56;  Conservative    0;  Mismatches   61;  Indels    0;  Gaps    0;

Qy        978 TTGGTGAAATAGTCTGTAAATATCTCTAGGTCCACTTGGTTTATGACATCAGTTAGCTCC 1037
              || |||||   ||         ||  | |  ||||| | ||  |   | |||     ||||
Db        884 TTTGTGAACCGGTTGTGCTTGATGACCACCTCCACCTCGTGCACCGCCTCACCGCCCTCC 825

Qy       1038 AGCATTTCTCTGTTTCGTTTTTTGTTGAGATGACCTAACTGTTGGAGAGAATGGGGT 1094
                |   ||  |||| || |     | ||           || | |||| | |||| |
Db        824 TCCTGCTCCGTGTTCCGGTCCCCTTCGAATCTCTTGGCTTGGTAGAGACAGTGGGCT 768


RESULT 214
AX147505
LOCUS       AX147505                1551 bp    DNA     linear   PAT 08-JUN-2001
DEFINITION  Sequence 59 from Patent WO0136632.
ACCESSION   AX147505
VERSION     AX147505.1  GI:14346662
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Levine,Z., David,A., Azar,I., Khosravi,R. and Bernstein,J.
  TITLE     Variants of alternative splicing
  JOURNAL   Patent: WO 0136632-A 59 25-MAY-2001;
            Compugen Ltd. (IL)
FEATURES             Location/Qualifiers
     source          1. .1551
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.7%;  Score 19.4;  DB 1;  Length 1551;
  Best Local Similarity   60.4%;  Pred. No. 2e+02;
  Matches   32;  Conservative    0;  Mismatches   21;  Indels    0;  Gaps    0;

Qy       1584 TGTGTGTGTGTGTGTGTGTGTGTGTGTCTGTGTCTGTGTCTTGTGTGTC 1636
              ||  |||| |||  |||||||  |  || | |||  | |||||  ||
Db       1448 TGCATGTGCGTGCCTGTGTGTCCATCATTGGCACTGTTGCTCACTTGTGCTTC 1500


RESULT 215
MMU44795
LOCUS       MMU44795                1850 bp    mRNA    linear   ROD 23-MAY-1996
DEFINITION  Mus musculus coagulation factor VII (fVII) mRNA, complete cds.
ACCESSION   U44795
VERSION     U44795.1  GI:1184738
KEYWORDS    .
SOURCE      Mus musculus (house mouse)
  ORGANISM  Mus musculus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE   1  (bases 1 to 1850)
  AUTHORS   Idusogie,E., Rosen,E., Geng,J.P., Carmeliet,P., Collen,D. and
            Castellino,F.J.
  TITLE     Characterization of a cDNA encoding murine coagulation factor VII
  JOURNAL   Thromb. Haemost. 75 (3), 481-487 (1996)
  MEDLINE   96276538
   PUBMED   8701412
REFERENCE   2  (bases 1 to 1850)
  AUTHORS   Rosen,E.D., Idusogie,E., Carmeliet,P., Collen,D. and
            Castellino,F.J.
  TITLE     Direct Submission
  JOURNAL   Submitted (05-JAN-1996) Elliot D. Rosen, Chemistry, Univ. of Notre
            Dame, Notre Dame, IN 46556, USA
FEATURES             Location/Qualifiers
     source          1. .1850
                     /organism="Mus musculus"
                     /mol_type="mRNA"
                     /db_xref="taxon:10090"
                     /tissue_type="liver"
     gene            1. .1850
                     /gene="fVII"
     CDS             16. .1356
                     /gene="fVII"
                     /note="initiation of extrinsic pathway of blood
                     coagulation; serine protease"
                     /codon_start=1
                     /product="coagulation factor VII"
                     /protein_id="AAC52570.1"
                     /db_xref="GI:1184739"
                     /translation="MVPQAHGLLLLCFLLQLQGPLGTAVFITQEEAHGVLHRQRRANS
                     LLEELWPGSLERECNEEQCSFEEAREIFKSPERTKQFWIVYSDGDQCASNPCQNVGTC
                     QDHLKSYVCFCLLDFEGRNCEKSKNEQLICANENGDCDQYCRDHVGTKRTCSCHEDYT
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LQPDEVSCKPKVEYPCGRIPVVEKRNSSSRQGRIVGGNVCPKGECPWQAVLKINGLLL
CGAVLLDARWIVTAAHCFDNIRYWGNITVVMGEHDFSEKDGDEQVRRVTQVIMPDKYI
RGKINHDIALLRLHRPVTFTDYVVPLCLPEKSFSENTLARIRFSRVSGWGQLLDRGAT
ALELMSIEVPRLMTQDCLEHAKHSSNTPKITENMFCAGYMDGTKDACKGDSGGPHATH
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polyA_site 1850
/gene="fVII"
/note="54 A nucleotides"

Query Match 0.7%; Score 19.4; DB 1; Length 1850;
Best Local Similarity 60.4%; Pred. No. 2e+02;
Matches 32; Conservative 0; Mismatches 21; Indels 0; Gaps 0;

Qy 1584 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTCTGTGTCTGTGTCTTGTGTGTC 1636
Db 1749 TGCATGTGCGTGCCTGTGTGTCCATCATTGGCACTGTTGCTCACTTGTGCTTC 1801

RESULT 216
BC061149
LOCUS BC061149 1869 bp mRNA linear ROD 25-NOV-2003
DEFINITION Mus musculus coagulation factor VII, mRNA (cDNA clone MGC:74281 IMAGE:30305571), complete cds.
ACCESSION BC061149
VERSION BC061149.1 GI:38511701
KEYWORDS MGC.
SOURCE Mus musculus (house mouse)
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE 1 (bases 1 to 1869)
AUTHORS Strausberg,R.L., Feingold,E.A., Grouse,L.H., Derge,J.G., Klausner,R.D., Collins,F.S., Wagner,L., Shenmen,C.M., Schuler,G.D., Altschul,S.F., Zeeberg,B., Buetow,K.H., Schaefer,C.F., Bhat,N.K., Hopkins,R.F., Jordan,H., Moore,T., Max,S.I., Wang,J., Hsieh,F., Diatchenko,L., Marusina,K., Farmer,A.A., Rubin,G.M., Hong,L., Stapleton,M., Soares,M.B., Bonaldo,M.F., Casavant,T.L., Scheetz,T.E., Brownstein,M.J., Usdin,T.B., Toshiyuki,S., Carninci,P., Prange,C., Raha,S.S., Loquellano,N.A., Peters,G.J., Abramson,R.D., Mullahy,S.J., Bosak,S.A., McEwan,P.J., McKernan,K.J., Malek,J.A., Gunaratne,P.H., Richards,S., Worley,K.C., Hale,S., Garcia,A.M., Gay,L.J., Hulyk,S.W., Villalon,D.K., Muzny,D.M., Sodergren,E.J., Lu,X., Gibbs,R.A., Fahey,J., Helton,E., Ketteman,M., Madan,A., Rodrigues,S., Sanchez,A., Whiting,M., Madan,A., Young,A.C., Shevchenko,Y., Bouffard,G.G., Blakesley,R.W., Touchman,J.W., Green,E.D., Dickson,M.C., Rodriguez,A.C., Grimwood,J., Schmutz,J., Myers,R.M., Butterfield,Y.S., Krzywinski,M.I., Skalska,U., Smailus,D.E., Schnerch,A., Schein,J.E., Jones,S.J. and Marra,M.A.
TITLE Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences
JOURNAL Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
MEDLINE 22388257
PUBMED 12477932
REFERENCE 2 (bases 1 to 1869)
AUTHORS Strausberg,R.
TITLE Direct Submission
JOURNAL Submitted (03-NOV-2003) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590, USA
REMARK NIH-MGC Project URL: http://mgc.nci.nih.gov
COMMENT Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Michael Brownstein
cDNA Library Preparation: Michael Brownstein / Ted Usdin Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human Genome Center, Stanford University School of Medicine, Stanford, CA 94305
Web site: http://www-shgc.stanford.edu
Contact: (Dickson, Mark) mcd@paxil.stanford.edu
Dickson, M., Schmutz, J., Grimwood, J., Rodriquez, A., and Myers, R. M.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Series: IRAL Plate: 53 Row: n Column: 1
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 6753805.
FEATURES Location/Qualifiers
source 1. .1869
/organism="Mus musculus"
/mol_type="mRNA"
/db_xref="taxon:10090"
/clone="MGC:74281 IMAGE:30305571"
/tissue_type="Liver, mouse"
/clone_lib="NIH_MGC_177"
/lab_host="DH10B"
/note="Vector: pDNR-LIB"
gene 1. .1869
/gene="F7"
/note="synonyms: FVII, mfVII"
/db_xref="LocusID:14068"
/db_xref="MGI:109325"
CDS 10. .1350
/codon_start=1
/product="coagulation factor VII"
/protein_id="AAH61149.1"
/db_xref="GI:38511702"
/db_xref="LocusID:14068"
/translation="MVPQAHGLLLLCFLLQLQGPLGTAVFITQEEAHGVLHRQRRANS
LLEELWPGSLERECNEEQCSFEEAREIFKSPERTKQFWIVYSDGDQCASNPCQNGGTC
QDHLKSYVCFCLLDFEGRNCEKSKNEQLICANENGDCDQYCRDHVGTKRTCSCHEDYT
LQPDEVSCKPKVEYPCGRIPVVEKRNSSSRQGRIVGGNVCPKGECPWQAVLKINGLLL
CGAVLLDARWIVTAAHCFDNIRYWGNITVVMGEHDFSEKDGDEQVRRVTQVIMPDKYI
RGKINHDIALLRLHRPVTFTDYVVPLCLPEKSFSENTLARIRFSRVSGWGQLLDRGAT
ALELMSIEVPRLMTQDCLEHAKHSSNTPKITENMFCAGYMDGTKDACKGDSGGPHATH
YHGTWYLTGVVSWGEGCAAIGHIGVYTRVSQYIDWLVRHMDSKLQVGVFRLPLL"
misc_feature 79. .264
/note="GLA; Region: Domain containing Gla (gamma-carboxyglutamate) residues"
/db_xref="CDD:smart00069"
misc_feature 268. .378
/note="EGF_CA; Region: Calcium-binding EGF-like domain, present in a large number of membrane-bound and extracellular (mostly animal) proteins. Many of these proteins require calcium for their biological function and calcium-binding sites have been found to be located at the N-terminus of particular EGF-like domains"
/db_xref="CDD:cd00054"
misc_feature 589. .1302
/note="Tryp_SPc; Region: Trypsin-like serine protease"
/db_xref="CDD:cd00190"

Query Match 0.7%; Score 19.4; DB 1; Length 1869;
Best Local Similarity 60.4%; Pred. No. 1.9e+02;
Matches 32; Conservative 0; Mismatches 21; Indels 0; Gaps 0;

Qy 1584 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTCTGTGTCTGTGTCTTGTGTGTC 1636
Db 1742 TGCATGTGCGTGCCTGTGTGTCCATCATTGGCACTGTTGCTCACTTGTGCTTC 1794

RESULT 217
MUSACROS02
LOCUS MUSACROS02 281 bp DNA linear ROD 27-APR-1993
DEFINITION Mouse acrosin gene, exon 2.
ACCESSION M96427 M63847
VERSION M96427.1 GI:191636
KEYWORDS acrosin.
SEGMENT 2 of 5
SOURCE Mus musculus (house mouse)
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

```
REFERENCE   1  (bases 1 to 281)
  AUTHORS   Kremling,H., Keime,S., Wilhelm,K., Adham,I.M., Hameister,H. and
            Engel,W.
  TITLE     Mouse proacrosin gene: nucleotide sequence, diploid expression, and
            chromosomal localization
  JOURNAL   Genomics 11 (4), 828-834 (1991)
  MEDLINE   92147126
   PUBMED   1783391
COMMENT     Original source text: Mus musculus (library: Stratagene) DNA.
FEATURES             Location/Qualifiers
     source          1. .281
                     /organism="Mus musculus"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:10090"
                     /tissue_lib="Stratagene"
     intron          order(M96426.1:1170. .1291,1. .62)
                     /gene="acrosin"
                     /note="750 bp gap"
                     /number=1
     exon            63. .269
                     /gene="acrosin"
                     /number=2

  Query Match             0.7%;  Score 19.2;  DB 1;  Length 281;
  Best Local Similarity   62.5%;  Pred. No. 2e+02;
  Matches   30;  Conservative    0;  Mismatches   18;  Indels    0;  Gaps    0;

Qy       1827 TTTTTCTAAGTGCAGTAGTCTGGCCTGACATCTGTAGTCTCTTGGAGT 1874
              |||  | | | |||||   |||| ||  | || || ||| ||  | ||
Db         29 TTTCCCAACGAGCAGTTTCCTGGTCTCTCCTCAGTGGTCCCTGTGGGT 76


RESULT 218
AX524801
LOCUS       AX524801                368 bp    DNA     linear   PAT 21-NOV-2002
DEFINITION  Sequence 831 from Patent EP1236798.
ACCESSION   AX524801
VERSION     AX524801.1  GI:25169897
KEYWORDS    .
SOURCE      Mus musculus (house mouse)
  ORGANISM  Mus musculus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE   1
  AUTHORS   Hoefer,M., Hofmann,M., Kaiser,C., Kranz,H., Loebbert,R. and
            Schlueter,T.
  TITLE     Gene library and method for its production
  JOURNAL   Patent: EP 1236798-A 831 04-SEP-2002;
            LION Bioscience AG (DE)
FEATURES             Location/Qualifiers
     source          1. .368
                     /organism="Mus musculus"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:10090"

  Query Match             0.7%;  Score 19.2;  DB 1;  Length 368;
  Best Local Similarity   52.5%;  Pred. No. 2.1e+02;
  Matches   42;  Conservative    0;  Mismatches   38;  Indels    0;  Gaps    0;

Qy         65 TTTCTTCTGCTTCATCTGCACTGGGATGTTCAGATGTTCAGGTCTTGCTGTTGTAGAACC 124
              | | |  ||||  | |||     |    | ||| ||||  | ||    |   |||   ||
Db        254 TGTGTGATGCTGAAGCTGGTGGAGAGCTTGCAGGTGTTGCGATCCACGTAGGGTACCTCC 313

Qy        125 ACCAGTTTCTGGTTGTGCCA 144
              | ||  ||| || ||| | |
Db        314 AGCATCTTCAGGATGTTCGA 333


RESULT 219
AX553539
LOCUS       AX553539                368 bp    DNA     linear   PAT 27-NOV-2002
DEFINITION  Sequence 831 from Patent WO02074953.
ACCESSION   AX553539
VERSION     AX553539.1  GI:25897539
KEYWORDS    .
SOURCE      Mus musculus (house mouse)
  ORGANISM  Mus musculus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE   1
  AUTHORS   Hoefer,M., Hofmann,M., Kaiser,C., Kranz,H., Loebbert,R. and
            Schlueter,T.
  TITLE     Gene library and a method for producing the same
  JOURNAL   Patent: WO 02074953-A 831 26-SEP-2002;
            LION Bioscience AG (DE)
FEATURES             Location/Qualifiers
     source          1. .368
                     /organism="Mus musculus"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:10090"

  Query Match             0.7%;  Score 19.2;  DB 1;  Length 368;
  Best Local Similarity   52.5%;  Pred. No. 2.1e+02;
  Matches   42;  Conservative    0;  Mismatches   38;  Indels    0;  Gaps    0;

Qy         65 TTTCTTCTGCTTCATCTGCACTGGGATGTTCAGATGTTCAGGTCTTGCTGTTGTAGAACC 124
              | | |  ||||  | |||     |    | ||| ||||  | ||    |   |||   ||
Db        254 TGTGTGATGCTGAAGCTGGTGGAGAGCTTGCAGGTGTTGCGATCCACGTAGGGTACCTCC 313

Qy        125 ACCAGTTTCTGGTTGTGCCA 144
              | ||  ||| || ||| | |
Db        314 AGCATCTTCAGGATGTTCGA 333


RESULT 220
GOTA3/c
LOCUS       GOTA3                   471 bp    DNA     linear   MAM 09-FEB-1999
DEFINITION  Goat gene for protein C (precursor of vitamin k-dependent serine
            protease), partial cds (catalytic region).
ACCESSION   D43752
VERSION     D43752.1  GI:601887
KEYWORDS    protein C; blood coagulation-related; serine protease zymogen;
            vitamin K-dependent serine protease.
SOURCE      Capra hircus (goat)
  ORGANISM  Capra hircus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
            Bovidae; Caprinae; Capra.
REFERENCE   1  (bases 1 to 471)
  AUTHORS   Murakawa,M., Okamura,T., Kamura,T., Kuroiwa,M., Harada,M. and
            Niho,Y.
  TITLE     A comparative study of partial primary structures of the catalytic
            region of mammalian protein C
  JOURNAL   Br. J. Haematol. 86 (3), 590-600 (1994)
  MEDLINE   94318474
   PUBMED   8043441
REFERENCE   2  (bases 1 to 471)
  AUTHORS   Murakawa,M.
  TITLE     Direct Submission
  JOURNAL   Submitted (06-DEC-1994) Masahiro Murakawa, Harasanshin General
            Hospital, Division of Hematology; 1-8 Taihaku-machi, Hakata-ku,
            Fukuoka, Fukuoka 812, Japan (Tel:092-291-3434, Fax:092-291-3266)
FEATURES             Location/Qualifiers
     source          1. .471
                     /organism="Capra hircus"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9925"
     CDS             <1. .>471
                     /function="regulation of blood coagulation"
                     /note="catalytic region"
                     /codon_start=1
                     /product="protein C"
                     /protein_id="BAA07809.1"
                     /db_xref="GI:1304082"
                     /translation="ESWEVDLDIKEVIVRPNYTKSTSDNDIALLHLAKPATLSQTIVP
                     ICLPDSGLSERKLTQVGQETVVTGWGYRDETKKNRTSILNFIKIPVVSYNACVHAMEN
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KVSENMLCAGILGNPRDACEGDSGGPMVTFFRGTWFLVGLVSWGEGCGRLNNYGI"

Query Match 0.7%; Score 19.2; DB 1; Length 471;
Best Local Similarity 50.0%; Pred. No. 2.1e+02;
Matches 48; Conservative 0; Mismatches 48; Indels 0; Gaps 0;

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Qy       2274 GACCAAGGTATCCATTTCTTCTATCTTGTCTTCACTGCCTGAGATTCTCTCTTCTATCTC 2333
              ||   ||||     |||  |   ||| |||      |||  ||  | || |  |  ||||
Db        246 GATGGAGGTGCGGTTTTTCTTGGTCTCGTCACGGTAGCCCCAGCCTGTCACCACAGTCTC 187

Qy       2334 TTGTATTCTGTCAGTGAGGCTTGTCTCTGAGGTTCC 2369
                ||       | ||||||  |   ||| |||   ||
Db        186 CTGGCCGACCTGAGTGAGCTTGCGCTCAGAGAGGCC 151
```

RESULT 221
BV094002/c
LOCUS BV094002 596 bp DNA linear STS 15-OCT-2003
DEFINITION RPAMMSEQ0005940 Roche Palo Alto Mus musculus STS genomic, sequence tagged site.
ACCESSION BV094002
VERSION BV094002.1 GI:37671481
KEYWORDS STS.
SOURCE Mus musculus (house mouse)
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE 1 (bases 1 to 596)
AUTHORS Usuka,J., Liao,G., Cheng,J., Nguyen,A., Bach,C., Puech,A., McPherson,J.D., Foernzler,D. and Peltz,G.
TITLE Mus musculus SNPs
JOURNAL Unpublished (2003)
COMMENT
Contact: Jonathan Usuka
Roche Palo Alto Genetics and Genomics Department
Roche Palo Alto
3431 Hillview Ave, Mailstop S3-1, Palo Alto, CA 94024, USA
Tel: 6508555807
Email: Jonathan.Usuka@roche.com
Primer A: No primer submitted
Primer B: No primer submitted.
FEATURES Location/Qualifiers
source 1. .596
/organism="Mus musculus"
/mol_type="genomic DNA"
/db_xref="taxon:10090"
/map="18-10064-9474-AC126686.3.1.232817"
/clone_lib="Roche Palo Alto"
/note="SNPs developed from assay sequences derived from 15 different strains-of mice (as of October 1, 2003). Those strains include A/J, A/HeJ,~129/Sv, AKR/J, B10.D2-H2/oSnJ, BALB/cByJ, BALB/cJ, C3H/HeJ, C57BL/6J,~CAST/Ei, DBA/2J, MRL/MpJ, NZB/BinJ, NZW/LaC, SPRET/Ei.~"
STS <1. .>596

Query Match 0.7%; Score 19.2; DB 1; Length 596;
Best Local Similarity 49.5%; Pred. No. 2.2e+02;
Matches 48; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

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Qy        733 TTCTTGATTTCTATCTTGGCTCATTTTTAACTCAGTAGTGAGTTGTTTGGTTTCCATAAG 792
              |||| | | |    | | |  ||||  |  |      ||   |  |||        ||
Db        555 TTCTGGCTCTNAAGGGAGACACCCTTTCCCCAATGTAACTGTGAATCCATTTGAGGTAG 496

Qy        793 TTTGTAAGTTTTCTGTTGTTTCTGTTGTTGTTGTTGT 829
                ||   | |||  ||| | | |  | |||||| |||
Db        495 CTTCCCACTTTGGTGTAGATGCCATAGTTGTTGGTGT 459
```

RESULT 222
RABTHRO
LOCUS RABTHRO 826 bp mRNA linear MAM 08-MAY-1993
DEFINITION Oryctolagus cuniculus thrombin mRNA, 3' end.
ACCESSION M81396
VERSION M81396.1 GI:165740
KEYWORDS thrombin.
SOURCE Oryctolagus cuniculus (rabbit)
ORGANISM Oryctolagus cuniculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
REFERENCE 1 (bases 1 to 826)
AUTHORS Banfield,D.K. and MacGillivray,R.T.
TITLE Partial characterization of vertebrate prothrombin cDNAs: amplification and sequence analysis of the B chain of thrombin from nine different species
JOURNAL Proc. Natl. Acad. Sci. U.S.A. 89 (7), 2779-2783 (1992)
MEDLINE 92212913
PUBMED 1557383
COMMENT Original source text: Oryctolagus cuniculus adult liver cDNA to mRNA.
FEATURES Location/Qualifiers
source 1. .826
/organism="Oryctolagus cuniculus"
/mol_type="mRNA"
/db_xref="taxon:9986"
/tissue_type="liver"
/dev_stage="adult"
gene 1. .826
/gene="thrombin"
CDS <1. .708
/gene="thrombin"
/codon_start=1
/product="thrombin"
/protein_id="AAA31477.1"
/db_xref="GI:165741"
/translation="QELLCAASLISDRWVLTAAHCLLYPPWDKNFTVNDILVRIGKYA
RSRYERNMEKISTLEKIIIHPGYNWRENLDRDIALMKLKKPVAFSDYIHPVCLPDKQI
VTSLLQAGHKGRVTGWGNLKEMWTVNMNEVQPSVLQMVNLPLVERPICKASTGIRVTD
NMFCAGYKPEEGKRGDACEGDSGGPFVMKNPYNNRWYQMGIVSWGEGCDRDGKYGFYT
HVFRLKKWIRKMVDRFG"
3'UTR 706. .816
/gene="thrombin"

Query Match 0.7%; Score 19.2; DB 1; Length 826;
Best Local Similarity 51.1%; Pred. No. 2.2e+02;
Matches 45; Conservative 0; Mismatches 43; Indels 0; Gaps 0;

```
Qy       1434 CATATCCATTCTGTTACCCAGTATCTTTTTCTAGAGAAATTAAGATCATTGAGTCATTGA 1493
              || |  ||||||    ||     |    | || |||||  ||     |  |   ||||
Db        714 CACACACATTCTGGGCTCCTCACTGCGATGTTACAGAAACCAACCCAGTCAAAGAATTGT 773

Qy       1494 TGTTGAGAATTATCAATGAGCAGTGTTT 1521
              | |||  |  || |   | | | |||  ||
Db        774 TTTTGTGGTTTGTGCCTAAACGGTGGTT 801
```

RESULT 223
AF465270
LOCUS AF465270 1302 bp mRNA linear VRT 02-FEB-2003
DEFINITION Gallus gallus anticoagulant protein C precursor (PROC) mRNA, complete cds.
ACCESSION AF465270
VERSION AF465270.1 GI:28194011
KEYWORDS .
SOURCE Gallus gallus (chicken)
ORGANISM Gallus gallus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae; Gallus.
REFERENCE 1 (bases 1 to 1302)
AUTHORS Davidson,C.J., Hirt,R.P., Lal,K., Snell,P., Elgar,G., Tuddenham,E.G.D. and McVey,J.H.
TITLE Comparative sequence analysis and molecular evolution of blood coagulation genes from Gallus gallus and Fugu rubripes
JOURNAL Unpublished
REFERENCE 2 (bases 1 to 1302)
AUTHORS McVey,J.H., Davidson,C.J., Lal,K., Snell,P. and Elgar,G.

```
  TITLE     Direct Submission
  JOURNAL   Submitted (04-JAN-2002) Haemostasis Group, MRC Clinical Sciences
            Centre, The Faculty of Medicine, Imperial College, Hammersmith
            Campus, Du Cane Road, London W12 0NN, UK
FEATURES             Location/Qualifiers
     source          1. .1302
                     /organism="Gallus gallus"
                     /mol_type="mRNA"
                     /db_xref="taxon:9031"
     gene            1. .1302
                     /gene="PROC"
     CDS             1. .1302
                     /gene="PROC"
                     /EC_number="3.4.21.69"
                     /function="inactivates factors Va and VIIIa in the
                     presence of Ca++ ions and phospholipids"
                     /note="vitamin K dependent serine protease;
                     autoprothrombin IIa; coagulation factor XIV; contains 2
                     EGF-like domains; member of peptidase family S1/trypsin
                     family; synthesized in the liver and found in plasma"
                     /codon_start=1
                     /product="anticoagulant protein C precursor"
                     /protein_id="AAO33365.1"
                     /db_xref="GI:28194012"
                     /translation="MWKLITIGVLLAACSSPVCHASIFYSYKDANQVLKIRKRANSFL
                     EELKPGSVERECNEERCNFEEASEIFETKEATLEFWSKYVDGDQCAQKPCSNGACKDN
                     IGSYSCICDKGWEGAQCNYEVKYNKCSVDNGGCQHFCKEDPAKQCRYCSCASGYQLTN
                     DHNMCTPVVEFPCGRVKMDYTEGKAEFNIRLIGGNSGGRGFSPWRVMLQNLKGKFLCG
                     GVLIHPSWVLTAAHCVETGETLKVRLGKYHRLRIENSEQTIRVDKYVRHENYTKLTSD
                     NDIAMLHLAEPVMYNKYALPICLPTRDLAEHELTTKGRQMLVTGWGSTSDEMRNYSAL
                     LSYIEIPIVPKNECAQVMTNTISDNMLCAGSLGDRKDSCSGDSGGPMATKYKDTWFLV
                     GLVSWGEGCGKKEKFGVYTKVSQYLEWIQHHINKKSGSWRG"

  Query Match             0.7%;  Score 19.2;  DB 1;  Length 1302;
  Best Local Similarity   56.2%;  Pred. No. 2.2e+02;
  Matches   36;  Conservative    0;  Mismatches   28;  Indels    0;  Gaps    0;

Qy       1491 TGATGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAA 1550
                | ||| ||  || | | || | | ||| | ||||      |||| || | ||   ||
Db        617 TTATGCTGCAAAATCTGAAAGGGAAGTTTCTGTGTGGAGGTGTTCTCATCCATCCGTCCT 676

Qy       1551 GTGT 1554
                | ||
Db        677 GGGT 680


RESULT 224
AX211659/c
LOCUS       AX211659               1338 bp    DNA     linear   PAT 06-SEP-2001
DEFINITION  Sequence 2 from Patent WO0158935.
ACCESSION   AX211659
VERSION     AX211659.1  GI:15523891
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Andersen,K.V., Pedersen,A.H. and born S,C.
  TITLE     Factor vii or viia-like molecules
  JOURNAL   Patent: WO 0158935-A 2 16-AUG-2001;
            Maxygen Aps (DK)
FEATURES             Location/Qualifiers
     source          1. .1338
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"
     CDS             <115. .1335
                     /note="unnamed protein product"
                     /codon_start=1
                     /protein_id="CAC69301.1"
                     /db_xref="GI:15523892"
                     /db_xref="REMTREMBL:CAC69301"
                     /translation="ANAFLEELRPGSLERECKEEQCSFEEAREIFKDAERTKLFWISY
                     SDGDQCASSPCQNGGSCKDQLQSYICFCLPAFEGRNCETHKDDQLICVNENGGCEQYC
                     SDHTGTKRSCRCHEGYSLLADGVSCTPTVEYPCGKIPILEKRNASKPQGRIVGGKVCP
                     KGECPWQVLLLVNGAQLCGGTLINTIWVVSAAHCFDKIKNWRNLIAVLGEHDLSEHDG
                     DEQSRRVAQVIIPSTYVPGTTNHDIALLRLHQPVVLTDHVVPLCLPERTFSERTLAFV
                     RFSLVSGWGQLLDRGATALELMVLNVPRLMTQDCLQQSRKVGDSPNITEYMFCAGYSD
                     GSKDSCKGDSGGPHATHYRGTWYLTGIVSWGQGCATVGHFGVYTRVSQYIEWLQKLMR
                     SEPRPGVLLRAPFP"

  Query Match             0.7%;  Score 19.2;  DB 1;  Length 1338;
  Best Local Similarity   50.0%;  Pred. No. 2.2e+02;
  Matches   48;  Conservative    0;  Mismatches   48;  Indels    0;  Gaps    0;

Qy        371 GGTACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGGCAGGGCCATGGC 430
              ||  | | || || ||   | ||  ||       |||||  |  |  |    |||| |||
Db        619 GGACCTGCCAGGGGCACTCCCCCTTAGGGCAGACCTTCCCGCCGACGATCCGGCCCTGGG 560

Qy        431 TCTGGTGATCACTCCTCTAGTGAAAGGTGGGGGTCT 466
                | |  | |  ||| ||  |  |   |||| |||
Db        559 GTTTGCTAGCGTTCCGCTTTTCTAGAATGGGAATCT 524


RESULT 225
AX211661/c
LOCUS       AX211661               1357 bp    DNA     linear   PAT 06-SEP-2001
DEFINITION  Sequence 4 from Patent WO0158935.
ACCESSION   AX211661
VERSION     AX211661.1  GI:15523893
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Andersen,K.V., Pedersen,A.H. and born S,C.
  TITLE     Factor vii or viia-like molecules
  JOURNAL   Patent: WO 0158935-A 4 16-AUG-2001;
            Maxygen Aps (DK)
FEATURES             Location/Qualifiers
     source          1. .1357
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Expression cassette for expression of FVII in
                     mammalian cells"

  Query Match             0.7%;  Score 19.2;  DB 1;  Length 1357;
  Best Local Similarity   50.0%;  Pred. No. 2.2e+02;
  Matches   48;  Conservative    0;  Mismatches   48;  Indels    0;  Gaps    0;

Qy        371 GGTACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGGCAGGGCCATGGC 430
              ||  | | || || ||   | ||  ||       |||||  |  |  |    |||| |||
Db        632 GGACCTGCCAGGGGCACTCCCCCTTAGGGCAGACCTTCCCGCCGACGATCCGGCCCTGGG 573

Qy        431 TCTGGTGATCACTCCTCTAGTGAAAGGTGGGGGTCT 466
                | |  | |  ||| ||  |  |   |||| |||
Db        572 GTTTGCTAGCGTTCCGCTTTTCTAGAATGGGAATCT 537


RESULT 226
OCU49933/c
LOCUS       OCU49933               1558 bp    mRNA    linear   MAM 27-MAR-1996
DEFINITION  Oryctolagus cuniculus vitamin K-dependent protein C precursor mRNA,
            partial cds.
ACCESSION   U49933
VERSION     U49933.1  GI:1236620
KEYWORDS    .
SOURCE      Oryctolagus cuniculus (rabbit)
  ORGANISM  Oryctolagus cuniculus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
REFERENCE   1  (bases 1 to 1558)
  AUTHORS   Shen,L., He,X. and Dahlback,B.
  TITLE     Molecular cloning of rabbit vitamin K-dependent protein C and
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            demonstration of its mRNA in the reproductive organs
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 1558)
  AUTHORS   Shen,L., He,X. and Dahlback,B.
  TITLE     Direct Submission
  JOURNAL   Submitted (26-FEB-1996) Lei Shen, Clincal Chemistry, Lund
            University, University Hospital, Malmo S-205 02, Sweden
FEATURES             Location/Qualifiers
     source          1. .1558
                     /organism="Oryctolagus cuniculus"
                     /mol_type="mRNA"
                     /db_xref="taxon:9986"
                     /tissue_type="liver"
                     /dev_stage="adult"
     CDS             <1. .1377
                     /codon_start=1
                     /product="vitamin K-dependent protein C precursor"
                     /protein_id="AAA92956.1"
                     /db_xref="GI:1236621"
                     /translation="IPDDVGYRNQKTASKEGVCVVSKCQDGPNTLPRAKRANSFLEEL
                     RPSSLERECVEEVCDLEEAKEIFQSVDDTLAFWYKYVDGDQCAALPSEHPCSSQCCGH
                     GTCADSIGGFSCQCHGGWEGSFCQYEVRFSNCSVDNGGCAHYCLEEEAGRSCSCAPGY
                     ELADDHLQCEPAVRFPCGRLGWKRIEKKRGNVKRDLEQVDEMDEVDPRLIDGKLTRRG
                     DSPWQVILLDSKKKLACGAVLIHVSWVLTAAHCMEEPKKLFVRLGEYDLRRKERWELD
                     LNIQEVLIHPNYSRSTTDNDIALLRLAQPATLSQTIVPICLPDNGLAERELMQAGQET
                     VVTGWGYHSSREKEAKRNRTFILNFITVPVAPQNECEQVMSNIISENMLCAGILGDRR
                     DACDGDSGGPMVASFRGTWFLVGLVSWGEGCGDLNNYGVYTKVSRYLDWIHSHIEEKE
                     AAPESPAP"
     sig_peptide     <1. .108
                     /note="putative; leader peptide"
     mat_peptide     109. .1374
                     /product="vitamin K-dependent protein C"
                     /note="putative"

  Query Match             0.7%;  Score 19.2;  DB 1;  Length 1558;
  Best Local Similarity   54.2%;  Pred. No. 2.2e+02;
  Matches   39;  Conservative    0;  Mismatches   33;  Indels    0;  Gaps    0;

Qy        418 GCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGTGGGGGTCTGAGGCTCCAAT 477
              |||| || ||| |  ||    |   | | || |   ||| |  ||||| |   |
Db        898 GCAGCGCGATGTCGTTGTCTGTGGTACTCCGACTGTAGTTGGGGTGAATGAGGACCTCCT 839

Qy        478 GGTTGTTGATGT 489
              || |||| | ||
Db        838 GGATGTTCAGGT 827


RESULT 227
OCU77477/c
LOCUS       OCU77477                1619 bp    mRNA    linear   MAM 08-FEB-2002
DEFINITION  Oryctolagus cuniculus coagulation factor VII mRNA, complete cds.
ACCESSION   U77477 S56300
VERSION     U77477.1  GI:1698964
KEYWORDS    .
SOURCE      Oryctolagus cuniculus (rabbit)
  ORGANISM  Oryctolagus cuniculus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
REFERENCE   1  (bases 1 to 1619)
  AUTHORS   Brothers,A.B., Clarke,B.J., Sheffield,W.P. and Blajchman,M.A.
  TITLE     Complete nucleotide sequence of the cDNA encoding rabbit
            coagulation factor VII
  JOURNAL   Thromb. Res. 69 (2), 231-238 (1993)
  MEDLINE   93190306
   PUBMED   8383365
REFERENCE   2  (bases 1 to 1619)
  AUTHORS   Ruiz,S.R., Blajchman,M.A. and Clarke,B.J.
  TITLE     Direct Submission
  JOURNAL   Submitted (05-NOV-1996) Pathology, McMaster University, 1200 Main
            St. West, Hamilton, ONT L8N 3Z5, Canada
COMMENT     On Feb 8, 2002 this sequence version replaced gi:266294.
FEATURES             Location/Qualifiers
     source          1. .1619
                     /organism="Oryctolagus cuniculus"
                     /mol_type="mRNA"
                     /db_xref="taxon:9986"
                     /tissue_type="liver"
     CDS             22. .1356
                     /codon_start=1
                     /product="coagulation factor VII"
                     /protein_id="AAB37326.1"
                     /db_xref="GI:1698965"
                     /translation="MAPQARGLGLCSLLALQASLAAVFITQEEAHSVLRRQRRANSFL
                     EELRPGSLERECKEELCSFEEAREVFQSTERTKQFWITYNDGDQCASNPCQNGGSCED
                     QIQSYICFCLADFEGRNCEKNKNDQLICMYENGGCEQYCSDHVGSQRSCRCHEGYTLL
                     PNGVSCTPTVDYPCGKVPALEKRGASNPQGRIVGGKVCPKGECPWQAALMNGSTLLCG
                     GSLLDTHWVVSAAHCFDKLSSLRNLTIVLGEHDLSEHEGDEQVRHVAQLIMPDKYVPG
                     KTDHDIALLRLLQPAALTNNVVPLCLPERNFSESTLATIRFSRVSGWGQLLYRGALAR
                     ELMAIDVPRLMTQDCVEQSEHKPGSPEVTGNMFCAGYLDGSKDACKGDSGGPHATSYH
                     GTWYLTGVVSWGEGCAAVGHVGVYTRVSRYTEWLSRLMRSKLHHGIQRHPFP"

  Query Match             0.7%;  Score 19.2;  DB 1;  Length 1619;
  Best Local Similarity   67.5%;  Pred. No. 2.2e+02;
  Matches   27;  Conservative    0;  Mismatches   13;  Indels    0;  Gaps    0;

Qy       1532 GTTATCTTGCACTTGTGAAGTGTGTGTGTGTGTGTGTG 1571
              ||||  |  ||||  || ||    |||||||||  |||||
Db       1610 GTTAAATGACACTCCTGCAGAAGATGTGTGTGTCCGTGTG 1571


RESULT 228
AY022788
LOCUS       AY022788                224 bp    DNA     linear   PLN 07-FEB-2001
DEFINITION  Oryza sativa microsatellite MRG5113 containing (CGC)X8, genomic
            sequence.
ACCESSION   AY022788
VERSION     AY022788.1  GI:12706004
KEYWORDS    .
SOURCE      Oryza sativa
  ORGANISM  Oryza sativa
            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
            Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
            Ehrhartoideae; Oryzeae; Oryza.
REFERENCE   1  (bases 1 to 224)
  AUTHORS   Tao,N., Barbazuk,W.B., Liu,J., Wu,K. and Barry,G.F.
  TITLE     Simple sequence repeats from Monsanto rice genomic sequences
  JOURNAL   Unpublished
REFERENCE   2  (bases 1 to 224)
  AUTHORS   Tao,N., Barbazuk,W.B., Liu,J., Wu,K. and Barry,G.F.
  TITLE     Direct Submission
  JOURNAL   Submitted (10-JAN-2001) Genomics, Monsanto, 800 North Lindbergh
            Blvd., Creve Coeur, MO 63167, USA
COMMENT     Derived from rice genomic sequences generated from the Monsanto
            Rice Genome Sequencing project. Please see
            http://www.rice-research.org for more information.  The sequence
            data were produced primarily in the laboratories of Dr. Leroy Hood
            at the University of Washington in Seattle.
FEATURES             Location/Qualifiers
     source          1. .224
                     /organism="Oryza sativa"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:4530"
     repeat_region   1. .224
                     /note="microsatellite MRG5113"
                     /rpt_type=tandem
                     /rpt_unit="cgc"

  Query Match             0.7%;  Score 19;  DB 1;  Length 224;
  Best Local Similarity   65.1%;  Pred. No. 2.2e+02;
  Matches   28;  Conservative    0;  Mismatches   15;  Indels    0;  Gaps    0;

Qy        287 CCTCCAGGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTC 329
              ||||  ||||| |||  || | ||| || |||     ||| ||
Db          6 CCTCATGGAGCCGGCGAGGGACAGCTTCGGGTTCAGCCTCGTC 48
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RESULT 229
SSU73464
LOCUS       SSU73464                 230 bp    DNA     linear   MAM 29-OCT-1996
DEFINITION  Sus scrofa growth hormone (pGH) gene, exon 2, partial cds.
ACCESSION   U73464
VERSION     U73464.1  GI:1644506
KEYWORDS    .
SOURCE      Sus scrofa (pig)
  ORGANISM  Sus scrofa
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
REFERENCE   1  (bases 1 to 230)
  AUTHORS   Jiang,Z.H., Rottmann,O.J. and Pirchner,F.
  TITLE     Sequence Characterization of Genetic Polymorphisms at the 2nd Exon
            of Porcine Growth Hormone Gene
  JOURNAL   J. of Nanjing Agricultural University (1997) In press
REFERENCE   2  (bases 1 to 230)
  AUTHORS   Jiang,Z.H., Rottmann,O.J. and Pirchner,F.
  TITLE     Hha I Enzyme Reveals New Genetic Polymorphisms at the 2nd Exon of
            pGH Gene
  JOURNAL   J. of Animal Breeding and Genetics (1996) In press
REFERENCE   3  (bases 1 to 230)
  AUTHORS   Jiang,Z.H.
  TITLE     Direct Submission
  JOURNAL   Submitted (04-OCT-1996) College of Animal Science and Technology,
            Nanjing Agricultural University, 6 TongWei Road, Nanjing, Jiangsu
            210095, China
FEATURES             Location/Qualifiers
     source          1. .230
                     /organism="Sus scrofa"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9823"
                     /chromosome="12"
                     /map="12p14"
     gene            41. .201
                     /gene="pGH"
     CDS             <41. .>201
                     /gene="pGH"
                     /codon_start=3
                     /product="growth hormone"
                     /protein_id="AAB17619.1"
                     /db_xref="GI:1644507"
                     /translation="PRTSALLAFALLCLPWTREVGAFPAMPLSSLFANAVLRAQHLHQ
                     LAADTYKEF"
     exon            <41. .201
                     /gene="pGH"
                     /number=2
     variation       56
                     /gene="pGH"
                     /replace="t"
     variation       69
                     /gene="pGH"
                     /replace="t"
     variation       95
                     /gene="pGH"
                     /replace="a"
     variation       104
                     /gene="pGH"
                     /replace="a"
     variation       105
                     /gene="pGH"
                     /replace="a"
     variation       144
                     /gene="pGH"
                     /replace="t"
     variation       183
                     /gene="pGH"
                     /replace="t"

  Query Match             0.7%;  Score 19;  DB 1;  Length 230;
  Best Local Similarity   47.8%;  Pred. No. 2.2e+02;
  Matches   55;  Conservative    0;  Mismatches   60;  Indels    0;  Gaps    0;

Qy        331 AGATGCTGGCAGGCCCAATGATCATGTGGTCAGTCCCCTGGGTACAGGCATGGCCATGGC 390
              || ||   ||   ||||   ||   | |||   ||  |   |  | ||   ||   ||
Db         98 AGGTGGGCGCCTTCCCAGCCATGCCCTTGTCCAGCCTATTTGCCAACGCCGTGCTCCGGG 157

Qy        391 TCCAGAGATTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCC 445
                ||||    |||  |  |  | ||| | ||    || ||   | || | | | ||
Db        158 CCCAGCACCTGCACCAACTGGCTGCTGACACCTACAAGGAGTTTGTAAGCTCCCC 212


RESULT 230
HSCRYBB2S3
LOCUS       HSCRYBB2S3               244 bp    DNA     linear   PRI 28-NOV-2001
DEFINITION  Human beta B2 crystallin (CRYBB2) gene, exon 4.
ACCESSION   U72402
VERSION     U72402.1  GI:1763246
KEYWORDS    .
SEGMENT     3 of 5
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 244)
  AUTHORS   Litt,M., Carrero-Valenzuela,R., LaMorticella,D.M., Schultz,D.W.,
            Mitchell,T.N., Kramer,P. and Maumenee,I.H.
  TITLE     Autosomal dominant cerulean cataract is associated with a chain
            termination mutation in the human beta crystallin gene CRYBB2
  JOURNAL   Unpublished (1996)
REFERENCE   2  (bases 1 to 244)
  AUTHORS   Litt,M., Carrero-Valenzuela,R. and LaMorticella,D.
  TITLE     Direct Submission
  JOURNAL   Submitted (25-SEP-1996) Molecular and Medical Genetics, Oregon
            Health Sciences University, 3181 SW Sam Jackson Pk. Rd., Portland,
            OR 97201-3098, USA
FEATURES             Location/Qualifiers
     source          1. .244
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"
                     /chromosome="22"
                     /map="22q11-22q12.1"
                     /clone="YAC clone M686F7 from CEPH"
     primer_bind     1. .21
                     /gene="CRYBB2"
                     /note="forward PCR primer"
     exon            49. .181
                     /gene="CRYBB2"
                     /number=4
     primer_bind     complement(223. .244)
                     /note="reverse PCR primer"

  Query Match             0.7%;  Score 19;  DB 1;  Length 244;
  Best Local Similarity   65.1%;  Pred. No. 2.2e+02;
  Matches   28;  Conservative    0;  Mismatches   15;  Indels    0;  Gaps    0;

Qy        694 GGCACTACCGCATTCCCTCTCTCTTCCAAACACTTCTATTTCT 736
              | ||  |||  | ||||||||||| || | ||      |||||
Db        193 GCCATCACCCTACTCCCTCTCTCTGCCCATCATCCTACTTTCT 235


RESULT 231
HUMMA/c
LOCUS       HUMMA                    741 bp    mRNA    linear   PRI 10-FEB-1999
DEFINITION  Human mRNA for mesotrypsinogen, partial cds.
ACCESSION   D45417
VERSION     D45417.1  GI:644884
KEYWORDS    mesotrypsinogen; trypsin.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 741)
  AUTHORS   Fukuoka,S.
  JOURNAL   Unpublished
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REFERENCE   2  (bases 1 to 741)
  AUTHORS   Fukuoka,S.-I.
  TITLE     Direct Submission
  JOURNAL   Submitted (03-FEB-1995) Shin-Ichi Fukuoka, Kyoto University,
            Research Institute for Food Science; Gokanosho, Uji, Kyoto 611,
            Japan (E-mail:fukuoka@soya.food.kyoto-u.ac.jp, Tel:0774-33-6905,
            Fax:0774-33-3004)
FEATURES             Location/Qualifiers
     source          1. .741
                     /organism="Homo sapiens"
                     /mol_type="mRNA"
                     /db_xref="taxon:9606"
                     /clone="107-1,107-2,107-3"
                     /clone_lib="lambda gt10"
                     /dev_stage="adult"
     CDS             1. .>741
                     /EC_number="3.4.21.4"
                     /note="An isoform of human trypsinogen which is not
                     inhibited by naturally occuring trypsin inhibitors."
                     /codon_start=1
                     /product="mesotrypsinogen"
                     /protein_id="BAA08257.1"
                     /db_xref="GI:1321640"
                     /translation="MNPFLILAFVGAAVAVPFDDDDKIVGGYTCEENSLPYQVSLNSG
                     SHFCGGSLISEQWVVSAAHCYKTRIQVRLGEHNIKVLEGNEQFINAAKIIRHPKYNRD
                     TLDNDIMLIKLSSPAVINARVSTISLPTAPPAAGTECLISGWGNTLSFGADYPDELKC
                     LDAPVLTQAECKASYPGKITNSMFCVGFLEGGKDSCQRDSGGPVVCNGQLQGVVSWGH
                     GCAWKNRPGVYTKVYNYVDWIKDTIAANS"
     sig_peptide     1. .45
     mat_peptide     46. .69
                     /product="activation peptide"
     mat_peptide     70. .741
                     /product="mature enzyme"

  Query Match             0.7%;  Score 19;  DB 1;  Length 741;
  Best Local Similarity   71.4%;  Pred. No. 2.4e+02;
  Matches   25;  Conservative    0;  Mismatches   10;  Indels    0;  Gaps    0;

Qy        361 CAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAG 395
              ||| ||  |   | |||||| ||||||| ||||
Db        679 CAGGCCTGTTCTTCCAGGCACAGCCATGGCCCCAG 645


RESULT 232
E01617/c
LOCUS       E01617                    741 bp    RNA     linear   PAT 29-SEP-1997
DEFINITION  cDNA encoding human pancreatic trypsinogen 3.
ACCESSION   E01617
VERSION     E01617.1  GI:2169870
KEYWORDS    JP 1988160582-A/1.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 741)
  AUTHORS   Takiguchi,H., Tani,T. and Kawashima,I.
  TITLE     NOVEL HUMAN PANCREATIC TRYPSIN
  JOURNAL   Patent: JP 1988160582-A 1 04-JUL-1988;
            SANKYO CO LTD
COMMENT     OS   Homo sapiens
            PN   JP 1988160582-A/1
            PD   04-JUL-1988
            PF   25-DEC-1986 JP 1986307770
            PI   TAKIGUCHI HIROSHI, TANI TOKIO, KAWASHIMA ICHIRO PC
            C12N9/76,A61K37/24,C12N1/20,C12N15/00//C07K13/00,(C12N9/76, PC
            C12R1:91),
            PC   (C12N1/20,C12R1:19),(C12N1/20,C12R1:125);
            CC   strandedness: Single;
            CC   topology: Linear;
            CC   hypothetical: No;
            CC   anti-sense: No;
            CC   *source: tissue_type=Pancreas;
            FH   Key             Location/Qualifiers
            FH
            FT   sig_peptide     1. .45
            FT   mat_peptide     46. .741
            FT                   /product='Pancreatic trypsinogen 3' FT
            mat_peptide     replace(46. .69,' ')
            FT                   /product='Pancreatic trypsin 3'.
FEATURES             Location/Qualifiers
     source          1. .741
                     /organism="Homo sapiens"
                     /mol_type="genomic RNA"
                     /db_xref="taxon:9606"

  Query Match             0.7%;  Score 19;  DB 1;  Length 741;
  Best Local Similarity   71.4%;  Pred. No. 2.4e+02;
  Matches   25;  Conservative    0;  Mismatches   10;  Indels    0;  Gaps    0;

Qy        361 CAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAG 395
              ||| ||  |   | |||||| ||||||| ||||
Db        679 CAGGCCTGTTCTTCCAGGCACAGCCATGGCCCCAG 645


RESULT 233
E09633/c
LOCUS       E09633                    744 bp    RNA     linear   PAT 29-SEP-1997
DEFINITION  DNA encoding Spleen TrypsinIII.
ACCESSION   E09633
VERSION     E09633.1  GI:22026260
KEYWORDS    JP 1995184655-A/1.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 744)
  AUTHORS   Takiguchi,H., Tani,T. and Kawashima,I.
  TITLE     NEW HUMAN-PANCREATIC TRYPSIN
  JOURNAL   Patent: JP 1995184655-A 1 25-JUL-1995;
            SANKYO CO LTD
COMMENT     OS   Homo sapiens (human)
            PN   JP 1995184655-A/1
            PD   25-JUL-1995
            PF   25-DEC-1986 JP 1994311512
            PI   TAKIGUCHI HIROSHI, TANI TOKIO, KAWASHIMA ICHIRO PC
            C12N15/09,C07H21/04,C12N5/10,C12N9/76//A61K38/46; CC
            strandedness: Double;
            CC   topology: Linear;
            FH   Key             Location/Qualifiers
            FH
            FT   source          1. .744
            FT                   /organism='Homo sapiens'
            FT                   /tissue_type='spleen'
            FT   CDS             1. .744
            FT                   /product='Spleen TrypsinogenIII' FT
            sig_peptide     1. .45
            FT   mat_peptide     46. .741
            FT                   /product='Spleen TrypsinIII'
            FT   variation       replace(744,'g')
            FT   variation       replace(743,'g').
FEATURES             Location/Qualifiers
     source          1. .744
                     /organism="Homo sapiens"
                     /mol_type="genomic RNA"
                     /db_xref="taxon:9606"

  Query Match             0.7%;  Score 19;  DB 1;  Length 744;
  Best Local Similarity   71.4%;  Pred. No. 2.4e+02;
  Matches   25;  Conservative    0;  Mismatches   10;  Indels    0;  Gaps    0;

Qy        361 CAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAG 395
              ||| ||  |   | |||||| ||||||| ||||
Db        679 CAGGCCTGTTCTTCCAGGCACAGCCATGGCCCCAG 645


RESULT 234
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E15808/c
LOCUS       E15808                  790 bp    DNA     linear   PAT 28-JUL-1999
DEFINITION  Human mRNA for trypsinogen-like protein, complete cds.
ACCESSION   E15808
VERSION     E15808.1  GI:5710491
KEYWORDS    JP 1998099080-A/1.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 790)
  AUTHORS   Nakanishi,J. and Koyama,J.
  TITLE     DNA CAPABLE OF CODING TRYPSINOGEN-LIKE PROTEIN AND ITS PROTEIN
  JOURNAL   Patent: JP 1998099080-A 1 21-APR-1998;
            SHISEIDO CO LTD
COMMENT     OS   Homo sapiens (human)
            PN   JP 1998099080-A/1
            PD   21-APR-1998
            PF   26-SEP-1996 JP 1996273923
            PI   NAKANISHI JIYOUTAROU, KOYAMA JUNICHI
            PC   C12N15/09,C07H21/04,C07K14/47,C12N9/64//A61K38/43; CC
            strandedness: Double;
            CC   topology: Linear;
            FH   Key             Location/Qualifiers
            FH
            FT   source          1. .790
            FT                   /organism='Homo sapiens'
            FT                   /cell_type='keratinocyte'
            FT   CDS             1. .723
            FT                   /product='tyrpsinogen-like protein' FT
            sig_peptide     1. .48.
FEATURES             Location/Qualifiers
     source          1. .790
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"

  Query Match             0.7%;  Score 19;  DB 1;  Length 790;
  Best Local Similarity   71.4%;  Pred. No. 2.5e+02;
  Matches   25;  Conservative    0;  Mismatches   10;  Indels    0;  Gaps    0;

Qy        361 CAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAG 395
              ||| ||  |   | |||||| |||||||| ||||
Db        658 CAGGCCTGTTCTTCCAGGCACAGCCATGGCCCCAG 624


RESULT 235
AF312826/c
LOCUS       AF312826                804 bp    mRNA    linear   INV 02-MAR-2001
DEFINITION  Luidia foliolata sea star regeneration-associated protease SRAP
            mRNA, complete cds.
ACCESSION   AF312826
VERSION     AF312826.1  GI:13183619
KEYWORDS    .
SOURCE      Luidia foliolata
  ORGANISM  Luidia foliolata
            Eukaryota; Metazoa; Echinodermata; Eleutherozoa; Asterozoa;
            Asteroidea; Valvatacea; Paxillosida; Luidiidae; Luidia.
REFERENCE   1  (bases 1 to 804)
  AUTHORS   Vickery,M.C., Vickery,M.S., McClintock,J.B. and Amsler,C.D.
  TITLE     Utilization of a novel deuterostome model for the study of
            regeneration genetics: molecular cloning of genes that are
            differentially expressed during early stages of larval sea star
            regeneration
  JOURNAL   Gene 262 (1-2), 73-80 (2001)
  MEDLINE   21100442
   PUBMED   11179669
REFERENCE   2  (bases 1 to 804)
  AUTHORS   Vickery,M.C.L., Vickery,M.S., McClintock,J.B. and Amsler,C.D.
  TITLE     Direct Submission
  JOURNAL   Submitted (12-OCT-2000) Department of Biology, University of
            Alabama at Birmingham, 1300 University Blvd., Birmingham, AL
            35294-1170, USA
FEATURES             Location/Qualifiers
     source          1. .804
                     /organism="Luidia foliolata"
                     /mol_type="mRNA"
                     /db_xref="taxon:105861"
                     /dev_stage="larva"
     CDS             1. .804
                     /note="serine protease"
                     /codon_start=1
                     /product="sea star regeneration-associated protease SRAP"
                     /protein_id="AAK15274.1"
                     /db_xref="GI:13183620"
                     /translation="MLRLLVLCALAAFVYADCGVQVINPVLNKIVGGDEAVPGSWPWQ
                     VMFRKRYWAGDYQFCGGTLISDEWAVSAAHCFHNYGNINHYTAVVGAHDRDSVDSTQT
                     TVGLGKVFVHESYDTSTLDNDIALIKLSSPVSMSNYVNSVCLPTAATPTGTECVVTGW
                     GDQETAVDDPTLQQVVVPIISSEQCNRATWYGGEINDNMICAGFKEGGKDSCQGDSGG
                     PFVCQSASGEYELVGVVSWGYGCADARKPGVYAKVLNYVSWINNLVARN"

  Query Match             0.7%;  Score 19;  DB 1;  Length 804;
  Best Local Similarity   57.6%;  Pred. No. 2.5e+02;
  Matches   34;  Conservative    0;  Mismatches   25;  Indels    0;  Gaps    0;

Qy        233 GGGTCCCTCTTTCTCCAATTGATGCAATTGGAGGCTATGGCTCCTTTGATCACTCCTCC 291
              | |||| |   || |   |||| || |  | ||   |||    | |||||| | || ||
Db        632 GAGTCCTTGCCTCCCTCCTTGAAGCCAGCGCAGATCATGTTGTCATTGATCTCACCGCC 574


RESULT 236
BC030238/c
LOCUS       BC030238                821 bp    mRNA    linear   PRI 20-MAY-2002
DEFINITION  Homo sapiens, clone IMAGE:4537998, mRNA, partial cds.
ACCESSION   BC030238
VERSION     BC030238.1  GI:20988416
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 821)
  AUTHORS   Strausberg,R.
  TITLE     Direct Submission
  JOURNAL   Submitted (07-MAY-2002) National Institutes of Health, Mammalian
            Gene Collection (MGC), Cancer Genomics Office, National Cancer
            Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
            USA
  REMARK    NIH-MGC Project URL: http://mgc.nci.nih.gov
COMMENT     Contact: MGC help desk
            Email: cgapbs-r@mail.nih.gov
            Tissue Procurement: DCTD/DTP
            cDNA Library Preparation: Life Technologies, Inc.
            cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
            DNA Sequencing by: National Institutes of Health Intramural
            Sequencing Center (NISC),
            Gaithersburg, Maryland;
            Web site: http://www.nisc.nih.gov/
            Contact: nisc_mgc@nhgri.nih.gov
            Akhter,N., Ayele,K., Beckstrom-Sternberg,S.M., Benjamin,B.,
            Blakesley,R.W., Bouffard,G.G., Breen,K., Brinkley,C., Brooks,S.,
            Dietrich,N.L., Granite,S., Guan,X., Gupta,J., Haghighi,P.,
            Hansen,N., Ho,S.-L., Karlins,E., Laric,P., Legaspi,R., Maduro,Q.L.,
            Masiello,C., Maskeri,B., Mastrian,S.D.,McCloskey,J.C., McDowell,J.,
            Pearson,R., Stantripop,S., Thomas,P.J., Touchman,J.W., Tsurgeon,C.,
            Vogt,J.L., Walker,M.A., Wetherby,K.D., Wiggins,L., Young,A.,
            Zhang,L.-H. and Green,E.D.

            Clone distribution: MGC clone distribution information can be found
            through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
            Series: IRAK Plate: 62 Row: c Column: 1
            This clone was selected for full length sequencing because it
            passed the following selection criteria: GenomeScan gene
            prediction.
FEATURES             Location/Qualifiers
     source          1. .821
```

```
                     /organism="Homo sapiens"
                     /mol_type="mRNA"
                     /db_xref="taxon:9606"
                     /clone="IMAGE:4537998"
                     /tissue_type="Prostate, adenocarcinoma."
                     /clone_lib="NIH_MGC_91"
                     /lab_host="DH10B"
                     /note="Vector: pCMV-SPORT6"
     CDS             <1. .756
                     /codon_start=1
                     /product="Unknown (protein for IMAGE:4537998)"
                     /protein_id="AAH30238.1"
                     /db_xref="GI:20988417"
                     /translation="PRVRAARDADGCEALGTVAVPFDDDDKIVGGYTCEENSLPYQVS
                     LNSGSHFCGGSLISEQWVVSAAHCYKTRIQVRLGEHNIKVLEGNEQFINAAKIIRHPK
                     YNRDTLDNDIMLIKLSSPAVINARVSTISLPTAPPAAGTECLISGWGNTLSFGADYPD
                     ELKCLDAPVLTQAECKASYPGKITNSMFCVGFLEGGKDSCQRDSGGPVVCNGQLQGVV
                     SWGHGCAWKNRPGVYTKVYNYVDWIKDTIAANS"

  Query Match             0.7%;  Score 19;  DB 1;  Length 821;
  Best Local Similarity   71.4%;  Pred. No. 2.5e+02;
  Matches   25;  Conservative    0;  Mismatches   10;  Indels    0;  Gaps    0;

Qy        361 CAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAG 395
              ||| ||  |   | ||||||  |||||||| ||||
Db        691 CAGGCCTGTTCTTCCAGGCACAGCCATGGCCCCAG 657


RESULT 237
AX333266/c
LOCUS       AX333266                850 bp    DNA     linear   PAT 09-JAN-2002
DEFINITION  Sequence 3775 from Patent WO0194629.
ACCESSION   AX333266
VERSION     AX333266.1  GI:18123900
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Young,P.E., Augustus,M., Carter,K.C., Ebner,R., Endress,G.,
            Horrigan,S., Soppet,D.R. and Weaver,Z.
  TITLE     Cancer gene determination and therapeutic screening using signature
            gene sets
  JOURNAL   Patent: WO 0194629-A 3775 13-DEC-2001;
            Avalon Pharmaceuticals (US)
FEATURES             Location/Qualifiers
     source          1. .850
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.7%;  Score 19;  DB 1;  Length 850;
  Best Local Similarity   71.4%;  Pred. No. 2.5e+02;
  Matches   25;  Conservative    0;  Mismatches   10;  Indels    0;  Gaps    0;

Qy        361 CAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAG 395
              ||| ||  |   | ||||||  |||||||| ||||
Db        719 CAGGCCTGTTCTTCCAGGCACAGCCATGGCCCCAG 685


RESULT 238
HSTRYIVB/c
LOCUS       HSTRYIVB                850 bp    mRNA    linear   PRI 04-DEC-1998
DEFINITION  H.sapiens mRNA for trypsinogen IV b-form.
ACCESSION   X71345
VERSION     X71345.1  GI:405755
KEYWORDS    brain specific protein; trypsinogen.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Wiegand,U., Corbach,S., Minn,A., Kang,J. and Muller-Hill,B.
  TITLE     Cloning of the cDNA encoding human brain trypsinogen and
            characterization of its product
  JOURNAL   Gene 136 (1-2), 167-175 (1993)
  MEDLINE   94123994
   PUBMED   8294000
REFERENCE   2  (bases 1 to 850)
  AUTHORS   Wiegand,U.
  TITLE     Direct Submission
  JOURNAL   Submitted (06-APR-1993) U. Wiegand, Institut fuer Genetik der Univ
            zu Koeln, Weyertal 121, 5000 Koeln 41, FRG
FEATURES             Location/Qualifiers
     source          1. .850
                     /organism="Homo sapiens"
                     /mol_type="mRNA"
                     /db_xref="taxon:9606"
                     /tissue_type="brain"
     mRNA            join(<1. .79,80. .236,237. .490,491. .627,628. .>850)
     exon            <1. .79
                     /number=1
     CDS             join(5. .79,80. .236,237. .490,491. .627,628. .784)
                     /codon_start=1
                     /product="trypsinogen IV b-form"
                     /protein_id="CAA50484.1"
                     /db_xref="GI:3980129"
                     /db_xref="GOA:P35030"
                     /db_xref="SWISS-PROT:P35030"
                     /translation="MELHPLLGGRTWRAARDADGCEALGTVAVPFDDDDKIVGGYTCE
                     NSLPYQVSLNSGSHFCGGSLISEQWVVSAAHCYKTRIQVRLGEHNIKVLEGNEQFINA
                     AKIIRHPKYNRDTLDNDIMLIKLSSPAVINARVSTISLPTAPPAAGTECLISGWGNTL
                     SFGADYPDELKCLDAPVLTQAECKASYPGKITNSMFCVGFLEGGKDSCQRDSGGPVVC
                     NGQLQGVVSWGHGCAWKNRPGVYTKVYNYVDWIKDTIAANS"
     exon            80. .236
                     /number=2
     exon            237. .490
                     /number=3
     exon            491. .627
                     /number=4
     exon            628. .>850
                     /number=5

  Query Match             0.7%;  Score 19;  DB 1;  Length 850;
  Best Local Similarity   71.4%;  Pred. No. 2.5e+02;
  Matches   25;  Conservative    0;  Mismatches   10;  Indels    0;  Gaps    0;

Qy        361 CAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAG 395
              ||| ||  |   | ||||||  |||||||| ||||
Db        719 CAGGCCTGTTCTTCCAGGCACAGCCATGGCCCCAG 685


RESULT 239
HSTRPIV/c
LOCUS       HSTRPIV                 853 bp    mRNA    linear   PRI 15-OCT-1999
DEFINITION  Homo sapiens mRNA for trypsinogen IV a-form.
ACCESSION   X72781
VERSION     X72781.1  GI:3928429
KEYWORDS    trypsin IV; trypsinogen; zymogen.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Wiegand,U., Corbach,S., Minn,A., Kang,J. and Muller-Hill,B.
  TITLE     Cloning of the cDNA encoding human brain trypsinogen and
            characterization of its product
  JOURNAL   Gene 136 (1-2), 167-175 (1993)
  MEDLINE   94123994
   PUBMED   8294000
REFERENCE   2  (bases 1 to 853)
  AUTHORS   Wiegand,U.
  TITLE     Direct Submission
  JOURNAL   Submitted (22-MAR-1993) U. Wiegand, Institut fuer Genetik der Univ.
            zu Koeln, Weyertal 121, 5000 Koeln 41, FRG
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  REMARK     sequence revised by author 01-OCT-93
COMMENT      On Nov 26, 1998 this sequence version replaced gi:405754.
FEATURES             Location/Qualifiers
     source          1. .853
                     /organism="Homo sapiens"
                     /mol_type="mRNA"
                     /db_xref="taxon:9606"
                     /cell_line="human brain poly(A)+ RNA"
                     /tissue_type="brain"
     CDS             <1. .787
                     /codon_start=2
                     /product="trypsinogen IV a-form"
                     /protein_id="CAB58178.1"
                     /db_xref="GI:6066378"
                     /db_xref="GOA:P35030"
                     /db_xref="SWISS-PROT:P35030"
                     /translation="GLELHPLLGGRTWRAARDADGCEALGTVAVPFDDDDKIVGGYTC
                     EENSLPYQVSLNSGSHFCGGSLISEQWVVSAAHCYKTRIQVRLGEHNIKVLEGNEQFI
                     NAAKIIRHPKYNRDTLDNDIMLIKLSSPAVINARVSTISLPTAPPAAGTECLISGWGN
                     TLSFGADYPDELKCLDAPVLTQAECKASYPGKITNSMFCVGFLEGGKDSCQRDSGGPV
                     VCNGQLQGVVSWGHGCAWKNRPGVYTKVYNYVDWIKDTIAANS"
     exon            <1. .83
                     /number=1
     exon            84. .243
                     /number=2
     variation       134. .139
                     /note="allelic polymorphism"
     exon            244. .497
                     /number=3
     exon            498. .634
                     /number=4
     exon            635. .>853
                     /number=5
     polyA_signal    818. .823

  Query Match              0.7%;  Score 19;  DB 1;  Length 853;
  Best Local Similarity   71.4%;  Pred. No. 2.5e+02;
  Matches   25;  Conservative    0;  Mismatches   10;  Indels    0;  Gaps    0;

Qy        361 CAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAG 395
              ||| ||  |   | ||||||  |||||||| ||||
Db        722 CAGGCCTGTTCTTCCAGGCACAGCCATGGCCCCAG 688


RESULT 240
E01914
LOCUS       E01914                  1383 bp    DNA     linear   PAT 29-SEP-1997
DEFINITION  DNA encoding a hybrid protein of human protein C replaced with Gla
            domain of Factor X.
ACCESSION   E01914
VERSION     E01914.1  GI:2170163
KEYWORDS    JP 1989085096-A/1.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 1383)
  AUTHORS   Iwasaki,W., Takahashi,M. and Hashimoto,T.
  TITLE     HYBRID HUMAN PROTEIN C AND BIOTECHNOLOGICAL SYNTHESIS THEREOF
  JOURNAL   Patent: JP 1989085096-A 1 30-MAR-1989;
            HOECHST JAPAN KK
COMMENT     OS   Artificial gene
            OC   Artificial sequence; Genes.
            OS   Homo sapiens (man)
            PN   JP 1989085096-A/1
            PD   30-MAR-1989
            PF   09-JUN-1988 JP 1988140558
            PR   12-JUN-1987 JP 87P   145293
            PI   IWASAKI WAKAKO, TAKAHASHI MIKIKO, HASHIMOTO TAMOTSU PC
            C12P21/02,C07K13/00,C07K15/12,C12N15/00//A61K37/465,(C12P21/02, PC
             C12R1:91);
            CC   strandedness: Double;
            CC   topology: Linear;
            CC   hypothetical: No;
            CC   anti-sense: No;
            FH   Key             Location/Qualifiers
            FH
            FT   sig_peptide     1. .120
            FT                   /product='Factor X'
            FT   mat_peptide     121. .1377
            FT                   /product='Hybrid protein of human protein C
            FT                   replaced with
            FT                   Gla domain of Factor X'
            FT   CDS             1. .1383
            FT                   /product='Hybrid protein of human protein C
            FT                   replaced with
            FT                   Gla domain of Factor X'.
FEATURES             Location/Qualifiers
     source          1. .1383
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match              0.7%;  Score 19;  DB 1;  Length 1383;
  Best Local Similarity   50.5%;  Pred. No. 2.4e+02;
  Matches   46;  Conservative    0;  Mismatches   45;  Indels    0;  Gaps    0;

Qy        347 AATGATCATGTGGTCAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAGAGATTGCCTCT 406
              ||| | || || | | ||  || | |    | | || || |||  |    |  |||
Db        244 AATAAACACGTCGACGGTGACCAGTGCTTGGTCTTGCCCTTGGAGCACCCGTGCGCCAGC 303

Qy        407 TCCAGGTGCAGGCAGGGCCATGGCTCTGGTG 437
                | ||| |||| |||    ||  | ||
Db        304 CTGTGCTGCGGGCACGGCACGTGCATCGATG 334


RESULT 241
G06930/c
LOCUS       G06930                  302 bp    DNA     linear   STS 19-OCT-1995
DEFINITION  human STS WI-8529, sequence tagged site.
ACCESSION   G06930
VERSION     G06930.1  GI:860175
KEYWORDS    STS; STS sequence; primer; sequence tagged site.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 302)
  AUTHORS   Hudson,T.
  TITLE     Whitehead Institute/MIT Center for Genome Research; Physically
            Mapped ESTs
  JOURNAL   Unpublished (1995)
COMMENT
            Contact: Thomas Hudson
            Whitehead Institute/MIT Center for Genome Research
            Whitehead Institute for Biomedical Research
            9 Cambridge Center, Cambridge MA 02142 USA
            Tel: 617 252 1900
            Fax: 617 252 1902
            Email: thudson@genome.wi.mit.edu

            Primer A: GCAGCATGAAGAAGTACTGCC
            Primer B: ACCTGGATCTCCATCAGGTG
            STS size: 103
            PCR Profile:
                  Presoak:
                  Denaturation:
                  Annealing: 56 degrees C
                  Polymerization:
                  PCR Cycles: 35
                  Thermal Cycler:
            Protocol:
                Template: 10 ng
                Primer: each 5 pM
                dNTPs: each 4 nM
                Taq Polymerase: 0.025 units/ul
                Total Vol: 20 ul
```

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          Buffer:
              MgCl2: 1.5 mM
              KCl: 50 mM
              Tris-HCL: 10 mM
              pH: 9.3

          Prepared with primer pairs derived from T40510 -- dbEST.
FEATURES             Location/Qualifiers
     source          1. .302
                     /organism="Homo sapiens"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:9606"
                     /map="709_E_?; 743_H_2; 785_H_?; 898_B_4; 903_E_7;
                     952_C_5; 771_D_11; 942_B_10; 944_B_10"
     STS             104. .206
     primer_bind     104. .124
     primer_bind     complement(187. .206)

  Query Match              0.7%;  Score 18.8;  DB 1;  Length 302;
  Best Local Similarity   68.4%;  Pred. No. 2.6e+02;
  Matches   26;  Conservative    0;  Mismatches   12;  Indels    0;  Gaps    0;

Qy        312 CTCAGGTGATTGCTCCTCTAGATGCTGGCAGGCCCAAT 349
              | |||||   |||| ||| ||   || || |||||| |
Db        273 CACAGGTACCTGCTGCTCAAGCCTCTCGCGGGCCCAGT 236


RESULT 242
AR263850/c
LOCUS       AR263850                340 bp    DNA     linear   PAT 29-JAN-2003
DEFINITION  Sequence 28 from patent US 6331427.
ACCESSION   AR263850
VERSION     AR263850.1  GI:28075854
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 340)
  AUTHORS   Robison,K.E.
  TITLE     Protease homologs
  JOURNAL   Patent: US 6331427-A 28 18-DEC-2001;
FEATURES             Location/Qualifiers
     source          1. .340
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match              0.7%;  Score 18.8;  DB 1;  Length 340;
  Best Local Similarity   52.6%;  Pred. No. 2.6e+02;
  Matches   41;  Conservative    0;  Mismatches   37;  Indels    0;  Gaps    0;

Qy       1006 GGTCCACTTGGTTTATGACATCAGTTAGCTCCAGCATTTCTCTGTTTCGTTTTTTGTTGA 1065
              | | | || |  ||   |||  |||||| | |  ||       | ||  |  |    |||
Db        156 GATACCCTGGAGTTTACACAGAAGTTAGTTTCTACAAGAAATGGATTATTGATCACCTGA 97

Qy       1066 GATGACCTAACTGTTGGA 1083
              ||  | ||  ||||| ||
Db         96 GACAAGCTTCCTGTTTGA 79


RESULT 243
AR263851/c
LOCUS       AR263851                340 bp    DNA     linear   PAT 29-JAN-2003
DEFINITION  Sequence 29 from patent US 6331427.
ACCESSION   AR263851
VERSION     AR263851.1  GI:28075855
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 340)
  AUTHORS   Robison,K.E.
  TITLE     Protease homologs
  JOURNAL   Patent: US 6331427-A 29 18-DEC-2001;
FEATURES             Location/Qualifiers
     source          1. .340
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match              0.7%;  Score 18.8;  DB 1;  Length 340;
  Best Local Similarity   52.6%;  Pred. No. 2.6e+02;
  Matches   41;  Conservative    0;  Mismatches   37;  Indels    0;  Gaps    0;

Qy       1006 GGTCCACTTGGTTTATGACATCAGTTAGCTCCAGCATTTCTCTGTTTCGTTTTTTGTTGA 1065
              | | | || |  ||   |||  |||||| | |  ||       | ||  |  |    |||
Db        156 GATACCCTGGAGTTTACACAGAAGTTAGTTTCTACAAGAAATGGATTATTGATCACCTGA 97

Qy       1066 GATGACCTAACTGTTGGA 1083
              ||  | ||  ||||| ||
Db         96 GACAAGCTTCCTGTTTGA 79


RESULT 244
DMU58868
LOCUS       DMU58868                352 bp    mRNA    linear   VRT 16-MAY-1997
DEFINITION  Dissostichus mawsoni antifreeze glycopeptide precursor (DM-AFGP)
            mRNA, partial cds, 3' region.
ACCESSION   U58868
VERSION     U58868.1  GI:1399808
KEYWORDS    .
SOURCE      Dissostichus mawsoni
  ORGANISM  Dissostichus mawsoni
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
            Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes;
            Notothenioidei; Nototheniidae; Dissostichus.
REFERENCE   1  (bases 1 to 352)
  AUTHORS   Chen,L., DeVries,A.L. and Cheng,C.H.
  TITLE     Evolution of antifreeze glycoprotein gene from a trypsinogen gene
            in Antarctic notothenioid fish
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 94 (8), 3811-3816 (1997)
  MEDLINE   97268652
   PUBMED   9108060
REFERENCE   2  (bases 1 to 352)
  AUTHORS   Chen,L., DeVries,A. and Cheng,C.
  TITLE     Direct Submission
  JOURNAL   Submitted (21-MAY-1996) Liangbiao Chen, Molecular and Integrative
            Physiology, University of Illinois, 524 Burrill Hall, 407 S.
            Goodwin Ave, Urbana, IL 61801, USA
FEATURES             Location/Qualifiers
     source          1. .352
                     /organism="Dissostichus mawsoni"
                     /mol_type="mRNA"
                     /db_xref="taxon:36200"
                     /tissue_type="pancreas"
     gene            1. .352
                     /gene="DM-AFGP"
     CDS             <1. .102
                     /gene="DM-AFGP"
                     /function="inhibits ice crystal growth"
                     /codon_start=1
                     /product="antifreeze glycopeptide precursor"
                     /protein_id="AAB57730.1"
                     /db_xref="GI:1399809"
                     /translation="AATPALNFVATPATAATAATAATAATAATAARG"

  Query Match              0.7%;  Score 18.8;  DB 1;  Length 352;
  Best Local Similarity   52.6%;  Pred. No. 2.6e+02;
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Qy       2426 TAATTCTATTTCCACTTTCAGGTCCTGAAATGTTTTACTCATTTTCCTCCCAGTATTTAC 2485
              |||    ||| ||| |||    || | |  | |   |||  ||  |  ||| |  |||
Db        249 TAAAGAAATTACCAGTTTATTTTCTTCACTTCTCCCACTGGTTCACAGCCCTGGTTTTTA 308

Qy       2486 ATTTTCATAGGTTTCTTT 2503
              |||||     | ||| |
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Db        309 TTTTTCTGTCCTCTCTCT 326
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RESULT 245
AX193364/c
LOCUS       AX193364                596 bp    DNA     linear   PAT 15-AUG-2001
DEFINITION  Sequence 931 from Patent WO0149716.
ACCESSION   AX193364
VERSION     AX193364.1  GI:15211315
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Xu,J., Lodes,M.J., Secrist,H., Benson,D.R., Meagher,M.J.,
            Stolk,J.A., King,G.E., Wang,T. and Jiang,Y.
  TITLE     Compounds for immunotherapy and diagnosis of colon cancer and
            methods for their use
  JOURNAL   Patent: WO 0149716-A 931 12-JUL-2001;
            CORIXA CORPORATION (US)
FEATURES             Location/Qualifiers
     source          1. .596
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.7%;  Score 18.8;  DB 1;  Length 596;
  Best Local Similarity   59.3%;  Pred. No. 2.7e+02;
  Matches   32;  Conservative    0;  Mismatches   22;  Indels    0;  Gaps    0;

Qy        781 GGTTTCCATAAGTTTGTAAGTTTTCTGTTGTTTCTGTTGTTGTTGTTGTTATCT 834
              ||  |||||  || ||   | | |||  ||| |  |  || | || ||| | ||
Db        376 GGCGTCCATGTGTGTGGTGGCTCTCTCGTGTCTGAGCAGTGGGTGCTGTCAGCT 323
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RESULT 246
AX375740
LOCUS       AX375740                786 bp    DNA     linear   PAT 01-MAR-2002
DEFINITION  Sequence 1 from Patent WO0198466.
ACCESSION   AX375740
VERSION     AX375740.1  GI:19170260
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Xiao,Y.
  TITLE     Regulation of human prostasin-like serine protease
  JOURNAL   Patent: WO 0198466-A 1 27-DEC-2001;
            Bayer Aktiengesellschaft (DE)
FEATURES             Location/Qualifiers
     source          1. .786
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.7%;  Score 18.8;  DB 1;  Length 786;
  Best Local Similarity   46.3%;  Pred. No. 2.8e+02;
  Matches   62;  Conservative    0;  Mismatches   72;  Indels    0;  Gaps    0;

Qy        385 CATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTC 444
              | || ||||||    |||  ||||  |     | | | |    | | |   ||  || ||
Db         14 CCTGTCTCCAGGTCCTGCTCCTTCTGGTGCTGGCCTGCGGGCAGCCCCGCATGTCCAGTC 73

Qy        445 CTCTAGTGAAAGGTGGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTATCTCAT 504
                | ||    ||  ||| |    ||  |  |  || |  |  |  | ||| |||
Db         74 GGATCGTTGGGGGCCGGGATGGCCGGGACGGAGAGTGGCCGTGGCAGGCGAGCATCCAGC 133

Qy        505 ACAGAGGATAGCAC 518
              | |  ||    |||
Db        134 ATCGTGGGGCACAC 147
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RESULT 247
AX675583
LOCUS       AX675583                882 bp    DNA     linear   PAT 27-MAR-2003
DEFINITION  Sequence 33 from Patent WO02055704.
ACCESSION   AX675583
VERSION     AX675583.1  GI:29333568
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Padigaru,M., Li,L., Zerhusen,B.D., Casman,S.J., Shenoy,S.,
            Spytek,K.A., Zhong,M., Gangolli,E.A., Burgess,C.E., Patturajan,M.,
            Vernet,C.A., Taylor,S., Tchernev,V.T., Miller,C.E., Guo,X.,
            Boldog,F.L., Grosse,W.M., Alsobrook,J.P., Gerlach,V.,
            Edingermark,S., Rothenberg,M.E., Ellerman,K., Macdougall,J.,
            Malyankar,U., Millet,I., Peyman,J., Smithson,G., Gunther,E. and
            Stone,D.J.
  TITLE     Proteins, polynucleotides encoding them and methods of using the
            same
  JOURNAL   Patent: WO 02055704-A 33 18-JUL-2002;
            Curagen Corporation (US)
FEATURES             Location/Qualifiers
     source          1. .882
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.7%;  Score 18.8;  DB 1;  Length 882;
  Best Local Similarity   59.3%;  Pred. No. 2.8e+02;
  Matches   32;  Conservative    0;  Mismatches   22;  Indels    0;  Gaps    0;

Qy        781 GGTTTCCATAAGTTTGTAAGTTTTCTGTTGTTTCTGTTGTTGTTGTTGTTATCT 834
              ||  |||||  || ||   | | |||  ||| |  |  || | || ||| | ||
Db        115 GGCGTCCATGTGTGTGGTGGCTCTCTCGTGTCTGAGCAGTGGGTGCTGTCAGCT 168
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RESULT 248
AX375744
LOCUS       AX375744                944 bp    DNA     linear   PAT 01-MAR-2002
DEFINITION  Sequence 5 from Patent WO0198466.
ACCESSION   AX375744
VERSION     AX375744.1  GI:19170262
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Xiao,Y.
  TITLE     Regulation of human prostasin-like serine protease
  JOURNAL   Patent: WO 0198466-A 5 27-DEC-2001;
            Bayer Aktiengesellschaft (DE)
FEATURES             Location/Qualifiers
     source          1. .944
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.7%;  Score 18.8;  DB 1;  Length 944;
  Best Local Similarity   46.3%;  Pred. No. 2.8e+02;
  Matches   62;  Conservative    0;  Mismatches   72;  Indels    0;  Gaps    0;

Qy        385 CATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTC 444
              | || ||||||    |||  ||||  |     | | | |    | | |   ||  || ||
Db         14 CCTGTCTCCAGGTCCTGCTCCTTCTGGTGCTGGCCTGCGGGCAGCCCCGCATGTCCAGTC 73

Qy        445 CTCTAGTGAAAGGTGGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTATCTCAT 504
                | ||    ||  ||| |    ||  |  |  || |  |  |  | ||| |||
Db         74 GGATCGTTGGGGGCCGGGATGGCCGGGACGGAGAGTGGCCGTGGCAGGCGAGCATCCAGC 133
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Qy        505 ACAGAGGATAGCAC 518
              |  | ||   |||
Db        134 ATCGTGGGGCACAC 147


RESULT 249
AX675581
LOCUS       AX675581               1161 bp    DNA     linear   PAT 27-MAR-2003
DEFINITION  Sequence 31 from Patent WO02055704.
ACCESSION   AX675581
VERSION     AX675581.1  GI:29333567
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Padigaru,M., Li,L., Zerhusen,B.D., Casman,S.J., Shenoy,S.,
            Spytek,K.A., Zhong,M., Gangolli,E.A., Burgess,C.E., Patturajan,M.,
            Vernet,C.A., Taylor,S., Tchernev,V.T., Miller,C.E., Guo,X.,
            Boldog,F.L., Grosse,W.M., Alsobrook,J.P., Gerlach,V.,
            Edingermark,S., Rothenberg,M.E., Ellerman,K., Macdougall,J.,
            Malyankar,U., Millet,I., Peyman,J., Smithson,G., Gunther,E. and
            Stone,D.J.
  TITLE     Proteins, polynucleotides encoding them and methods of using the
            same
  JOURNAL   Patent: WO 02055704-A 31 18-JUL-2002;
            Curagen Corporation (US)
FEATURES             Location/Qualifiers
     source          1. .1161
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

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  Best Local Similarity   59.3%;  Pred. No. 2.7e+02;
  Matches   32;  Conservative    0;  Mismatches   22;  Indels    0;  Gaps    0;

Qy        781 GGTTTCCATAAGTTTGTAAGTTTTCTGTTGTTTCTGTTGTTGTTGTTGTTATCT 834
              ||  |||||  || ||   | | |||  ||| |  |  || | || ||| | ||
Db        403 GGCGTCCATGTGTGTGGTGGCTCTCTCGTGTCTGAGCAGTGGGTGCTGTCAGCT 456


RESULT 250
AX523898/c
LOCUS       AX523898               1505 bp    DNA     linear   PAT 24-OCT-2002
DEFINITION  Sequence 105 from Patent WO02064799.
ACCESSION   AX523898
VERSION     AX523898.1  GI:24412662
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Seldon,R.F., Miller,A.M. and Treco,D.S.
  TITLE     Optimized messenger rna
  JOURNAL   Patent: WO 02064799-A 105 22-AUG-2002;
            TRANSKARYOTIC THERAPIES, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .1505
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             0.7%;  Score 18.8;  DB 1;  Length 1505;
  Best Local Similarity   63.0%;  Pred. No. 2.7e+02;
  Matches   29;  Conservative    0;  Mismatches   17;  Indels    0;  Gaps    0;

Qy        807 GTTGTTTCTGTTGTTGTTGTTATCTAGATTTAAGCTGTGGTGG 852
              | |||    |||||  |||||| |  |    ||  || ||||||||
Db        954 GATGTCGTGGTTGTACTTGTTGATGGCGGCGTTGTAGTTGTGGTGG 909


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Job time : 853 secs
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GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: August 5, 2004, 15:35:48 ; Search time 1037 Seconds
(without alignments)
3.988 Million cell updates/sec

Title: us-10-664-775-1
Perfect score: 2715
Sequence: 1 ctgcaggaagaggcgacagg.....ttgtaattctaggtgctgat 2715

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 0.5

Searched: 1612 seqs, 761539 residues

Total number of hits satisfying chosen parameters: 3224

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 250 summaries

Database : rngdb:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.		Score	% Query Match	Length	DB	ID	Description
c	1	43	1.6	2422	1	AAQ80296	cDNA encoding Fact
c	2	43	1.6	2422	1	AAV02230	Homo sapiens cDNA
c	3	43	1.6	2422	1	AAZ57385	Factor VII encodin
c	4	43	1.6	2422	1	AAF57099	Human Factor VII p
c	5	43	1.6	2422	1	ADC24226	Human NOV8a encodi
c	6	43	1.6	2462	1	AAX15425	DNA encoding coagu
c	7	43	1.6	2462	1	AAA12968	DNA encoding Facto
c	8	43	1.6	2462	1	AAZ56118	Vitamin-K-dependen
c	9	43	1.6	2462	1	AAA54032	Human factor VII c
c	10	43	1.6	2462	1	AAA89784	DNA encoding coagu
c	11	43	1.6	2462	1	ABL67255	Thyroid cancer rel
c	12	43	1.6	2462	1	ABN95753	Gene #2251 used to
c	13	43	1.6	2483	1	AAN60064	Factor VII cDNA of
c	14	41.6	1.5	2177	1	AAN60063	Partial Factor VII
c	15	41.6	1.5	2438	1	AAN60065	Factor IX/Factor V
	16	32.4	1.2	300	1	AAZ12625	Human gene express
	17	25.6	0.9	254	1	AAC16179	Human secreted pro
c	18	25.4	0.9	237	1	AAS68927	DNA encoding novel
c	19	25.2	0.9	1843	1	AAA54035	Human protein C co
c	20	25.2	0.9	1843	1	AAF54050	Human protein C ge
c	21	25.2	0.9	1843	1	ABN97175	Gene #3673 used to
	22	24.6	0.9	1361	1	ADC24228	Human NOV8b encodi
	23	24.4	0.9	282	1	ACD97548	Human colon cancer
	24	24.2	0.9	267	1	AAK45604	Human bone marrow
	25	24.2	0.9	267	1	AAK19599	Human brain expres
	26	24.2	0.9	267	1	ABS45294	Human liver single
	27	24.2	0.9	267	1	ABS19876	Human genome-deriv
	28	23.8	0.9	868	1	AAK93580	Human cDNA clone r
	29	23.8	0.9	868	1	AAK91631	Human cDNA 5'-end
	30	23.4	0.9	612	1	ABQ47966	Oligonucleotide fo
c	31	23.4	0.9	612	1	ABQ47967	Oligonucleotide fo
	32	23.2	0.9	379	1	ABX48480	Bovine EST associa
	33	23	0.8	260	1	ABX73083	Human GPCR cDNA #5
c	34	23	0.8	292	1	ABN21775	Human ORFX polynuc
c	35	23	0.8	306	1	AAT40850	Serine protease nf
c	36	23	0.8	1507	1	AAA54031	Human factor X cod
c	37	23	0.8	1507	1	ABZ35322	Human gene express
c	38	23	0.8	1507	1	ADE84862	Farnesyl transfera
c	39	22.8	0.8	200	1	AAD37041	Targetting arm #2
	40	22.8	0.8	433	1	ACH20452	Human adult liver
c	41	22.8	0.8	1151	1	AAD08286	Human secreted pro
	42	22.6	0.8	231	1	AAC55669	Human differential
	43	22.6	0.8	231	1	ACD81661	Human destructive
	44	22.6	0.8	259	1	AAC71307	Single nucleotide
c	45	22.4	0.8	271	1	AAC71343	Single nucleotide
c	46	22.4	0.8	476	1	AAI11531	Probe #1464 for ge
c	47	22.4	0.8	476	1	ABA53212	Human foetal liver
c	48	22.4	0.8	476	1	AAI32810	Probe #1496 used t
c	49	22.4	0.8	476	1	ABA42785	Human breast cell
c	50	22.4	0.8	476	1	ABA22986	Probe #1452 for ge
c	51	22.4	0.8	476	1	AAK26907	Human bone marrow
c	52	22.4	0.8	476	1	AAK01461	Human brain expres
c	53	22.4	0.8	476	1	ABS26497	Human liver single
c	54	22.4	0.8	476	1	AAI01449	Probe #1440 used t
c	55	22.4	0.8	476	1	ABS01506	Human genome-deriv
c	56	22.2	0.8	301	1	AAI19676	Probe #9609 for ge
c	57	22.2	0.8	301	1	ABA64702	Human foetal liver
c	58	22.2	0.8	301	1	AAI44871	Probe #13557 used
c	59	22.2	0.8	301	1	ABA46822	Human breast cell
c	60	22.2	0.8	301	1	ABA31826	Probe #10292 for g
c	61	22.2	0.8	301	1	AAK38868	Human bone marrow
c	62	22.2	0.8	301	1	AAK13137	Human brain expres
c	63	22.2	0.8	301	1	ABS38453	Human liver single
c	64	22.2	0.8	301	1	AAI05395	Probe #5386 used t
c	65	22.2	0.8	301	1	ABS12949	Human genome-deriv
c	66	22	0.8	121	1	ABA79626	Factor IX mutation
	67	22	0.8	121	1	ABA79623	Factor IX mutation
c	68	22	0.8	121	1	ABA79622	Factor IX mutation
c	69	22	0.8	121	1	ABA79634	Factor IX mutation
	70	22	0.8	121	1	ABA79627	Factor IX mutation
	71	22	0.8	121	1	ABA79631	Factor IX mutation
	72	22	0.8	121	1	ABA79635	Factor IX mutation
c	73	22	0.8	121	1	ABA79638	Factor IX mutation
c	74	22	0.8	121	1	ABA79630	Factor IX mutation
	75	22	0.8	121	1	ABA79639	Factor IX mutation
	76	22	0.8	121	1	ABA79619	Factor IX mutation
c	77	22	0.8	121	1	ABA79618	Factor IX mutation
c	78	22	0.8	385	1	AAC04575	Human secreted pro
c	79	22	0.8	612	1	ABQ47969	Oligonucleotide fo
	80	22	0.8	612	1	ABQ47968	Oligonucleotide fo
c	81	21.6	0.8	253	1	AAC70944	Single nucleotide
c	82	21.6	0.8	254	1	ABV98470	Human pancreatic c
c	83	21.6	0.8	786	1	ABA94394	Human prostasin-li
c	84	21.6	0.8	843	1	ABQ86175	Novel human gene.
c	85	21.6	0.8	849	1	ABQ86176	Novel human gene.
c	86	21.6	0.8	944	1	ABA94396	Human prostasin-li
c	87	21.6	0.8	1378	1	AAX87259	cDNA clone encodin
c	88	21.6	0.8	1378	1	AAX52262	Protein PRO343 cDN
c	89	21.6	0.8	1378	1	AAA46914	cDNA encoding nove
c	90	21.6	0.8	1378	1	ADC78574	Human PRO343 cDNA.
c	91	21.6	0.8	1378	1	AAF72420	Human PRO343 cDNA.
c	92	21.6	0.8	1378	1	ACA59110	Human PRO polynucl
c	93	21.6	0.8	1378	1	ACA58507	cDNA encoding huma
c	94	21.6	0.8	1378	1	ACA60214	Human cDNA for sec
c	95	21.6	0.8	1378	1	ACD07614	Novel human secret
c	96	21.6	0.8	1378	1	ABX71662	Human cDNA encodin
c	97	21.6	0.8	1378	1	ACH06994	Human secreted/tra
c	98	21.6	0.8	1378	1	ABX96231	Human secreted/tra
c	99	21.6	0.8	1378	1	ACA05552	cDNA encoding huma
c	100	21.6	0.8	1378	1	ACD20219	Human secreted / t
c	101	21.6	0.8	1378	1	ACA55022	Novel human secret
c	102	21.6	0.8	1378	1	ACD19857	Human secreted / t
c	103	21.6	0.8	1378	1	ADB29467	Human secreted/tra
c	104	21.6	0.8	1378	1	ADA18323	Human secreted/tra
c	105	21.6	0.8	1378	1	ACD67004	Human cDNA encodin
c	106	21.6	0.8	1378	1	ACD83165	Human PRO polynucl

c 107	21.6	0.8	1378	1	ADA16298	Human secreted/tra
c 108	21.6	0.8	1378	1	ADA42443	Human secreted/tra
c 109	21.6	0.8	1378	1	ACD23343	Human PRO polynucl
c 110	21.6	0.8	1378	1	ADA16722	Human secreted/tra
c 111	21.6	0.8	1378	1	ADA13151	Human secreted/tra
c 112	21.6	0.8	1378	1	ADA42019	Human secreted/tra
c 113	21.6	0.8	1378	1	ADA17366	Human secreted/tra
c 114	21.6	0.8	1378	1	ADA42869	Human secreted/tra
c 115	21.6	0.8	1378	1	ACD23705	Human PRO polynucl
c 116	21.6	0.8	1378	1	ADB77788	Human secreted/tra
c 117	21.6	0.8	1378	1	ADB74924	Human secreted/tra
c 118	21.6	0.8	1378	1	ADC28570	Human secreted/tra
c 119	21.6	0.8	1378	1	ADC39770	Human secreted/tra
c 120	21.6	0.8	1378	1	ADC40284	Human secreted/tra
c 121	21.6	0.8	1378	1	ADC19108	Human secreted/tra
c 122	21.6	0.8	1378	1	ADC34408	Human secreted/tra
c 123	21.6	0.8	1378	1	ADC29463	Human secreted/tra
c 124	21.6	0.8	1378	1	ADC28994	Human secreted/tra
c 125	21.6	0.8	1378	1	ADC40879	Human secreted/tra
c 126	21.6	0.8	1378	1	ADC19536	Human secreted/tra
c 127	21.6	0.8	1378	1	ADC33984	Human secreted/tra
c 128	21.6	0.8	1378	1	ADC13054	Human secreted/tra
c 129	21.6	0.8	1378	1	ADC12506	Human secreted/tra
c 130	21.6	0.8	1378	1	ADD05061	Human secreted/tra
c 131	21.6	0.8	1378	1	ADD04067	Human secreted/tra
c 132	21.6	0.8	1378	1	ADD03643	Human secreted/tra
c 133	21.6	0.8	1378	1	ADE34895	Human secreted/tra
c 134	21.6	0.8	1378	1	ADE79340	Human secreted/tra
c 135	21.6	0.8	1378	1	ADE79764	Human secreted/tra
c 136	21.6	0.8	1378	1	ADE73440	Human secreted/tra
c 137	21.6	0.8	1378	1	ADE73975	Human secreted/tra
c 138	21.6	0.8	6098	1	ABX14193	Plasmid pLN174 for
139	21.4	0.8	283	1	AAV28290	Galanin receptor G
140	21.4	0.8	283	1	AAV32651	Galanin receptor G
141	21.4	0.8	283	1	AAV44930	Galanin receptor G
142	21.4	0.8	283	1	ABK14060	Rat galanin recept
c 143	21.4	0.8	1129	1	AAS21354	Human cDNA sequenc
c 144	21.4	0.8	1129	1	ACD23963	Novel human secret
c 145	21.4	0.8	1129	1	ACA67104	cDNA encoding huma
c 146	21.4	0.8	1129	1	ACA03713	cDNA encoding huma
c 147	21.4	0.8	1129	1	ABX89251	DNA encoding novel
c 148	21.4	0.8	1129	1	ACD41905	Human secreted/tra
c 149	21.4	0.8	1129	1	ACA04134	Human cDNA encodin
c 150	21.4	0.8	1129	1	ADA45740	Novel human secret
c 151	21.4	0.8	1129	1	ADA76171	Human PRO polynucl
c 152	21.4	0.8	1129	1	ADA18821	Human PRO polynucl
c 153	21.4	0.8	1129	1	ADA61444	Homo sapiens. Nov
c 154	21.4	0.8	1129	1	ADB19229	Novel human secret
c 155	21.4	0.8	1129	1	ADB27770	cDNA encoding huma
c 156	21.4	0.8	1129	1	ADA86249	Novel human secret
c 157	21.4	0.8	1129	1	ADB15813	Human PRO polynucl
c 158	21.4	0.8	1129	1	ADA47599	Human PRO polynucl
c 159	21.4	0.8	1129	1	ADA67394	Human PRO polynucl
c 160	21.4	0.8	1129	1	ADB30401	cDNA encoding huma
c 161	21.4	0.8	1129	1	ADA85697	Novel human secret
c 162	21.4	0.8	1129	1	ADA96909	Human PRO polynucl
c 163	21.4	0.8	1129	1	ADA79213	Human PRO polynucl
c 164	21.4	0.8	1129	1	ADA87352	Novel human secret
c 165	21.4	0.8	1129	1	ADB16554	Human PRO polynucl
c 166	21.4	0.8	1129	1	ADA91646	Novel human secret
c 167	21.4	0.8	1129	1	ADB14709	Human PRO polynucl
c 168	21.4	0.8	1129	1	ADB18670	Novel human secret
c 169	21.4	0.8	1129	1	ADA93885	Human PRO polynucl
c 170	21.4	0.8	1129	1	ADB19781	Novel human secret
c 171	21.4	0.8	1129	1	ADB13093	Human PRO polynucl
c 172	21.4	0.8	1129	1	ACD98534	Novel human secret
c 173	21.4	0.8	1129	1	ADA74347	Human PRO polynucl
c 174	21.4	0.8	1129	1	ADB24580	Human PRO polynucl
c 175	21.4	0.8	1129	1	ADA82104	Human PRO polynucl
c 176	21.4	0.8	1129	1	ADA75067	Human PRO polynucl
c 177	21.4	0.8	1129	1	ADA85145	Novel human secret
c 178	21.4	0.8	1129	1	ADA84593	Novel human secret
c 179	21.4	0.8	1129	1	ADB29849	cDNA encoding huma
c 180	21.4	0.8	1129	1	ADA80377	Human PRO polynucl
c 181	21.4	0.8	1129	1	ADA75619	Human PRO polynucl
c 182	21.4	0.8	1129	1	ADA46844	Human PRO polynucl
c 183	21.4	0.8	1129	1	ADB25140	Human PRO polynucl
c 184	21.4	0.8	1129	1	ADA93316	Human PRO polynucl
c 185	21.4	0.8	1129	1	ADB26666	cDNA encoding huma
c 186	21.4	0.8	1129	1	ADB30953	cDNA encoding huma
c 187	21.4	0.8	1129	1	ADA60881	Homo sapiens. Nov
c 188	21.4	0.8	1129	1	ADB24028	Human PRO polynucl
c 189	21.4	0.8	1129	1	ADA96357	Human PRO polynucl
c 190	21.4	0.8	1129	1	ADA80929	Human PRO polynucl
c 191	21.4	0.8	1129	1	ADA95805	Human PRO polynucl
c 192	21.4	0.8	1129	1	ADB26114	cDNA encoding huma
c 193	21.4	0.8	1129	1	ADB21599	Novel human secret
c 194	21.4	0.8	1129	1	ADA77378	Human PRO polynucl
c 195	21.4	0.8	1129	1	ADB18118	cDNA encoding huma
c 196	21.4	0.8	1129	1	ADA86801	Novel human secret
c 197	21.4	0.8	1129	1	ADA87904	Novel human secret
c 198	21.4	0.8	1129	1	ADA46292	Novel human secret
c 199	21.4	0.8	1129	1	ADB28322	cDNA encoding huma
c 200	21.4	0.8	1129	1	ADB28874	cDNA encoding huma
c 201	21.4	0.8	1129	1	ADA76826	Human PRO polynucl
c 202	21.4	0.8	1129	1	ADA88456	Novel human secret
c 203	21.4	0.8	1129	1	ADA97461	Human PRO polynucl
c 204	21.4	0.8	1129	1	ADB27218	cDNA encoding huma
c 205	21.4	0.8	1129	1	ADB22151	Novel human secret
c 206	21.4	0.8	1129	1	ADA66842	Human PRO polynucl
c 207	21.4	0.8	1129	1	ADB22703	Human PRO polynucl
c 208	21.4	0.8	1129	1	ADB23476	Human PRO polynucl
c 209	21.4	0.8	1129	1	ADA92198	Novel human secret
c 210	21.4	0.8	1129	1	ADB15261	Human PRO polynucl
c 211	21.4	0.8	1129	1	ADB38513	Novel human secret
c 212	21.4	0.8	1129	1	ADB37961	Novel human secret
c 213	21.4	0.8	1129	1	ADB66433	Novel human secret
c 214	21.4	0.8	1129	1	ADB89513	Human PRO polynucl
c 215	21.4	0.8	1129	1	ADB90245	Human PRO polynucl
c 216	21.4	0.8	1129	1	ADB39346	Novel human secret
c 217	21.4	0.8	1129	1	ADB46969	Novel human secret
c 218	21.4	0.8	1129	1	ADB86576	Human PRO polynucl
c 219	21.4	0.8	1129	1	ADB77181	Novel human secret
c 220	21.4	0.8	1129	1	ADB34338	Human PRO polynucl
c 221	21.4	0.8	1129	1	ADB35442	Human PRO polynucl
c 222	21.4	0.8	1129	1	ADB33786	Human PRO polynucl
c 223	21.4	0.8	1129	1	ADB34890	Human PRO polynucl
c 224	21.4	0.8	1129	1	ADB35994	Human PRO polynucl
c 225	21.4	0.8	1129	1	ADB46389	Novel human secret
c 226	21.4	0.8	1129	1	ADC50262	Novel human secret
c 227	21.4	0.8	1129	1	ADC71809	Novel human secret
c 228	21.4	0.8	1129	1	ADC59788	Novel human secret
c 229	21.4	0.8	1129	1	ADC52795	Novel human secret
c 230	21.4	0.8	1129	1	ADC57149	Novel human secret
c 231	21.4	0.8	1129	1	ADC60340	Novel human secret
c 232	21.4	0.8	1129	1	ADC50815	Novel human secret
c 233	21.4	0.8	1129	1	ADC65342	Human PRO polynucl
c 234	21.4	0.8	1129	1	ADC54440	Novel human secret
c 235	21.4	0.8	1129	1	ADC53401	Novel human secret
c 236	21.4	0.8	1129	1	ADC58924	Novel human secret
c 237	21.4	0.8	1129	1	ADC55802	Novel human secret
c 238	21.4	0.8	1129	1	ADC58372	Novel human secret
c 239	21.4	0.8	1129	1	ADD03046	Novel human secret
c 240	21.4	0.8	1129	1	ADC90038	Novel human secret
c 241	21.4	0.8	1129	1	ADC69457	cDNA encoding huma
c 242	21.4	0.8	1129	1	ADC48346	Human PRO polynucl
c 243	21.4	0.8	1129	1	ADD09875	Human PRO polynucl
c 244	21.4	0.8	1129	1	ADD04450	Novel human secret
c 245	21.4	0.8	1129	1	ADC80406	Novel human secret
c 246	21.4	0.8	1129	1	ADD10913	Human PRO polynucl
c 247	21.4	0.8	1129	1	ADC47794	Human PRO polynucl
c 248	21.4	0.8	1129	1	ADC79854	Novel human secret
c 249	21.4	0.8	1129	1	ADD09323	Human PRO polynucl
c 250	21.4	0.8	1129	1	ADD41036	Novel human secret

ALIGNMENTS

RESULT 1
AAQ80296/c
ID AAQ80296 standard; cDNA; 2422 BP.
XX
AC AAQ80296;
XX
DT 25-MAR-2003 (revised)
DT 17-JUL-1995 (first entry)
XX
DE cDNA encoding Factor VII.
XX
KW Factor VII; plasma glycoprotein; derivative; tissue factor; TF;
KW inhibition; vascular restenosis; platelet deposition; catalytic centre;
KW factor IX; factor X; inactivation; thrombosis; embolism; stroke; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT CDS 41. .1375
FT /*tag= a
FT /note= "wild type Factor VII"
XX
PN WO9427631-A1.
XX
PD 08-DEC-1994.
XX
PF 23-MAY-1994; 94WO-US005779.
XX
PR 21-MAY-1993; 93US-00065725.
XX
PA (ZYMO) ZYMOGENETICS INC.
PA (NOVO) NOVO-NORDISK AS.
XX
PI Berkner KL, Petersen LC, Hart CE;
XX
DR WPI; 1995-022464/03.
XX
PT Inhibition of tissue factor, vascular restenosis and platelet deposition
PT - using modifier factor VII unable to activate factors IX and X, e.g. for
PT treating thrombosis, embolism, stroke etc. .
XX
PS Disclosure; Page 39-40; 51pp; English.
XX
CC AAQ80296 shows the cDNA encoding human Factor VII. Factor VII is a trace
CC plasma glycoprotein that circulates in blood as a single-chain zymogen.
CC The zymogen is catalytically inactive, and is converted into a two-chain
CC active mol. by cleavage of an internal peptide bond located approx. in
CC the middle of the mol. Factor VIIa rapidly activates Factor X or Factor
CC IX by limited proteolysis. Modified Factor VII has anticoagulant
CC properties, for preventing the coagulation cascade. The modified Factor
CC VII has an active site modified by at least one amino acid substitution,
CC and in its modified form is capable of binding tissue factor and
CC inhibiting its action. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 2422 BP; 596 A; 712 C; 692 G; 422 T; 0 U; 0 Other;

Query Match 1.6%; Score 43; DB 1; Length 2422;
Best Local Similarity 58.0%; Pred. No. 0.0001;
Matches 76; Conservative 0; Mismatches 55; Indels 0; Gaps 0;

Qy 1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
Db 1946 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1887

Qy 1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613
Db 1886 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1827

Qy 1614 TCTGTGTCTGT 1624
Db 1826 TCCATGTGTGT 1816

RESULT 2
AAV02230/c
ID AAV02230 standard; cDNA; 2422 BP.
XX
AC AAV02230;
XX
DT 08-JUN-1998 (first entry)
XX
DE Homo sapiens cDNA encoding Ser344Ala modified factor VII.
XX
KW Factor VII; modified; Ser344Ala mutant; vascular patency; prevention;
KW myocardial injury; blood flow; angioplasty; trauma; intimal hyperplasia;
KW restenosis; deep vein thrombosis; treatment; pulmonary embolism; stroke;
KW disseminated intravascular coagulation; fibrin deposition; endotoxaemia;
KW myocardial infarction; anticoagulant; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT CDS 41. .1375
FT /*tag= a
FT /product= "Ser344Ala modified factor VII"
XX
PN WO9747651-A1.
XX
PD 18-DEC-1997.
XX
PF 06-JUN-1997; 97WO-DK000251.
XX
PR 07-JUN-1996; 96US-00660289.
XX
PA (NOVO) NOVO-NORDISK AS.
PA (ZYMO) ZYMOGENETICS.
XX
PI Petersen LC, Hart CE, Hedner U, Rasmussen ME;
XX
DR WPI; 1998-052245/05.
DR P-PSDB; AAW31687.
XX
PT Inhibiting thrombus formation by topical administration of modified
PT factor VII - also used to maintain vascular patency, prevent myocardial
PT injury and improve regional myocardial blood flow.
XX
PS Example 1; Page 69-73; 97pp; English.
XX
CC The sequence is that encoding a Ser344Ala modified factor VII which can
CC be used as part of a method for inhibiting thrombus formation. The method
CC is used to maintain or improve vascular patency, to prevent or minimise
CC myocardial injury associated with post-ischaemic reperfusion and to
CC improve regional myocardial blood flow during post-ischaemic reperfusion.
CC The method is particularly used where the site of thrombus or reduced
CC patency is associated with (micro)surgery, angioplasty or trauma or where
CC the myocardial injury is myocardial necrosis. Particular applications are
CC in treatment or prevention of intimal hyperplasia or restenosis caused by
CC acute (e.g. mechanical) injury; deep vein thrombosis; pulmonary embolism;
CC stroke; disseminated intravascular coagulation; fibrin deposition
CC associated with endotoxaemia and myocardial infarction
XX
SQ Sequence 2422 BP; 596 A; 712 C; 692 G; 422 T; 0 U; 0 Other;

Query Match 1.6%; Score 43; DB 1; Length 2422;
Best Local Similarity 58.0%; Pred. No. 0.0001;
Matches 76; Conservative 0; Mismatches 55; Indels 0; Gaps 0;

Qy 1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
Db 1946 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1887

Qy 1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613

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Db       1886 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1827

Qy       1614 TCTGTGTCTGT 1624
              || ||| |||
Db       1826 TCCATGTGTGT 1816
```

RESULT 3
AAZ57385/c
ID AAZ57385 standard; cDNA; 2422 BP.
XX
AC AAZ57385;
XX
DT 05-APR-2000 (first entry)
XX
DE Factor VII encoding cDNA SEQ ID NO:1.
XX
KW Factor VII; catalytic active site; blood coagulation; plasma; Factor X;
KW Factor IX; vasotropic; antiischaemic; anticoagulant; myocardial injury;
KW post-ischaemic reperfusion; platelet deposition; thrombus formation;
KW vascular potency; ss.
XX
OS Unidentified.
XX
FH Key Location/Qualifiers
FT CDS 28. .1375
FT /*tag= a
FT /product= "Factor VII"
XX
PN US5997864-A.
XX
PD 07-DEC-1999.
XX
PF 06-JUN-1997; 97US-00871003.
XX
PR 28-FEB-1991; 91US-00662920.
PR 21-MAY-1993; 93US-00065725.
PR 23-MAY-1994; 94WO-US005779.
PR 24-OCT-1994; 94US-00327690.
PR 07-JUN-1995; 95US-00475845.
PR 07-JUN-1996; 96US-00660289.
XX
PA (NOVO) NOVO-NORDISK AS.
PA (ZYMO) ZYMOGENETICS INC.
XX
PI Hart CE, Petersen LC, Hedner U, Rasmussen ME;
XX
DR WPI; 2000-104599/09.
DR P-PSDB; AAY67967.
XX
PT Inhibition or minimization of myocardial injury associated with post-
PT ischemic reperfusion.
XX
PS Disclosure; Col 43-48; 34pp; English.
XX
CC The present invention describes a method for the inhibition or
CC minimisation of myocardial injury associated with post-ischaemic
CC reperfusion by administering factor VII, which has at least 1
CC modification in its catalytic triad (therefore inhibiting the ability of
CC factor VII to activate plasma factor X or IX). The method can be used for
CC inhibiting or minimising myocardial injury and for imparting regional
CC myocardial blood flow associated with post-ischaemic reperfusion. It can
CC also be used for inhibiting blood coagulation, platelet deposition,
CC thrombus formation and maintaining or improving vascular potency. Factor
CC VII can be administered at relatively low doses and does not produce
CC undesirable side effects. Further it acts specifically at sites of
CC injury. The present sequence encodes Factor VII
XX
SQ Sequence 2422 BP; 596 A; 712 C; 692 G; 422 T; 0 U; 0 Other;

Query Match 1.6%; Score 43; DB 1; Length 2422;
Best Local Similarity 58.0%; Pred. No. 0.0001;
Matches 76; Conservative 0; Mismatches 55; Indels 0; Gaps 0;

```
Qy       1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
              ||| | | | | || | | | | | | | | ||||| | | ||
Db       1946 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1887

Qy       1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613
              |||||| | |||||||||| | | | |||||||||| | | ||||||||||||
Db       1886 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1827

Qy       1614 TCTGTGTCTGT 1624
              || ||| |||
Db       1826 TCCATGTGTGT 1816
```

RESULT 4
AAF57099/c
ID AAF57099 standard; cDNA; 2422 BP.
XX
AC AAF57099;
XX
DT 14-MAY-2001 (first entry)
XX
DE Human Factor VII polypeptide encoding cDNA.
XX
KW Factor VIIa; thrombus; vascular patency; blood coagulation; Factor X;
KW plasma factor; Factor IX; myocardial injury; human; Factor VII; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT CDS 41. .1375
FT /*tag= a
FT sig_peptide 41. .154
FT /*tag= b
FT mat_peptide 155. .1372
FT /*tag= c
XX
PN US6183743-B1.
XX
PD 06-FEB-2001.
XX
PF 20-AUG-1999; 99US-00378907.
XX
PR 28-FEB-1991; 91US-00662920.
PR 28-FEB-1992; 92WO-US001636.
PR 21-MAY-1993; 93US-00065725.
PR 23-MAY-1994; 94WO-US005779.
PR 24-OCT-1994; 94US-00327690.
PR 07-JUN-1995; 95US-00475845.
PR 07-JUN-1996; 96US-00660289.
PR 06-JUN-1997; 97US-00871003.
XX
PA (ZYMO) ZYMOGENETICS INC.
PA (NOVO) NOVO NORDISK AS.
XX
PI Hart CE, Petersen LC, Hedner U, Rasmussen ME;
XX
DR WPI; 2001-201993/20.
DR P-PSDB; AAB61992.
XX
PT Use of modified human factor VIIa with a covalent modification in its
PT catalytic center, to inhibit thrombus formation or to maintain vascular
PT patency.
XX
PS Example; Col 43-48; 34pp; English.
XX
CC The invention relates to the use of modified human Factor VIIa for
CC inhibiting thrombus formation, or maintaining or improving vascular
CC patency in a patient. The modified factor VIIa comprises a covalent
CC modification in its catalytic center which effectively interrupts the
CC blood coagulation cascade. The modifications render Factor VIIa
CC substantially unable to activate plasma factor IX or X. The modified
CC Factor VIIa can be used for preventing or treating myocardial injury

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CC   associated with post-ischemic reperfusion, for improving regional
CC   myocardial blood flow during reperfusion and maintaining or improving
CC   vascular patency in a patient. The present sequence represents the cDNA
CC   encoding a human Factor VII polypeptide
XX
SQ   Sequence 2422 BP; 596 A; 712 C; 692 G; 422 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 43;  DB 1;  Length 2422;
  Best Local Similarity   58.0%;  Pred. No. 0.0001;
  Matches   76;  Conservative    0;  Mismatches   55;  Indels    0;  Gaps    0;

Qy       1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
             ||| | | | |   || |       | |  |  | |   |||||     |    |  ||
Db       1946 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1887

Qy       1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613
             ||||||  |  |||||||||  | | | ||||||||||  |   | ||||||||||||||
Db       1886 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1827

Qy       1614 TCTGTGTCTGT 1624
             ||  ||| |||
Db       1826 TCCATGTGTGT 1816


RESULT 5
ADC24226/c
ID   ADC24226 standard; cDNA; 2422 BP.
XX
AC   ADC24226;
XX
DT   18-DEC-2003  (first entry)
XX
DE   Human NOV8a encoding cDNA SEQ ID NO:33.
XX
KW   human; NOVX; cardiant; antiarteriosclerotic; hypotensive; vasotropic;
KW   dermatological; anorectic; immunosuppressive; cytostatic;
KW   antiinfertility; haemostatic; anti-HIV; antiasthmatic; antiinflammatory;
KW   neuroprotective; anabolic; nootropic; antiparkinsonian; gene therapy;
KW   cardiomyopathy; atherosclerosis; hypertension; congenital heart defect;
KW   pulmonary stenosis; scleroderma; obesity; metabolic disturbance; obesity;
KW   transplantation; adrenoleukodystrophy; congenital adrenal hyperplasia;
KW   prostate cancer; diabetes; metabolic disorder; neoplasm; adenocarcinoma;
KW   fertility; haemophilia; graft versus host disease; AIDS;
KW   bronchial asthma; Crohn's disease; multiple sclerosis;
KW   infectious disease; anorexia; neurodegenerative disorder;
KW   Alzheimer's disease; Parkinson's disease; immune disorder;
KW   haematopoietic disorder; dyslipidaemia; wasting disorder; gene; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             41. .1375
FT                   /*tag=  a
FT                   /product= "NOV8a"
XX
PN   WO2003076584-A2.
XX
PD   18-SEP-2003.
XX
PF   06-MAR-2003; 2003WO-US006951.
XX
PR   06-MAR-2002; 2002US-0361974P.
PR   19-MAR-2002; 2002US-0365477P.
PR   22-MAR-2002; 2002US-0366928P.
PR   06-AUG-2002; 2002US-0401661P.
PR   05-MAR-2003; 2003US-00401661.
XX
PA   (CURA-) CURAGEN CORP.
XX
PI   Alsobrook JP,  Burgess CE,  Edinger SR,  Gerlach VL,  Ji W,  Kekuda R;
PI   Li L,  Macdougall JR,  Miller CE,  Millet I,  Patturajan M,  Pena CEA;
PI   Rieger DK,  Sciore P,  Shenoy SG,  Smithson G,  Spytek KA,  Stone DJ;
PI   Voss EZ,  Zhong M;
XX
DR   WPI; 2003-722330/68.
DR   P-PSDB; ADC24227.
XX
PT   New NOVX polypeptides and nucleic acids, useful for diagnosing or
PT   treating e.g. cardiomyopathy, atherosclerosis, hypertension, scleroderma,
PT   obesity, prostate cancer, AIDS, bronchial asthma, Crohn's disease, or
PT   multiple sclerosis.
XX
PS   Claim 20; SEQ ID NO 33; 229pp; English.
XX
CC   The present invention describes novel human proteins, designated NOVX
CC   proteins. The NOVX sequences have cardiant, antiarteriosclerotic,
CC   hypotensive, vasotropic, dermatological, anorectic, immunosuppressive,
CC   cytostatic, antiinfertility, haemostatic, anti-HIV, antiasthmatic,
CC   antiinflammatory, neuroprotective, anabolic, nootropic and
CC   antiparkinsonian activities, and can be used in gene therapy. The NOVX
CC   sequences can be used as a therapeutic in the manufacture of a medicament
CC   for treating a syndrome associated with a human disease, such as a
CC   pathology associated with NOVX. The NOVX proteins and nucleic acids
CC   encoding them are useful for diagnosing or treating pathologies, diseases
CC   or conditions associated with NOVX sequences, including cardiomyopathy,
CC   atherosclerosis, hypertension, congenital heart defects, pulmonary
CC   stenosis, scleroderma, obesity, metabolic disturbances associated with
CC   obesity, transplantation, adrenoleukodystrophy, congenital adrenal
CC   hyperplasia, prostate cancer, diabetes, metabolic disorders, neoplasm,
CC   adenocarcinoma, fertility, haemophilia, graft versus host disease, AIDS,
CC   bronchial asthma, Crohn's disease, multiple sclerosis, infectious
CC   disease, anorexia, neurodegenerative disorders (e.g. Alzheimer's disease,
CC   or Parkinson's disease), immune disorders, haematopoietic disorders,
CC   dyslipidaemias, and wasting disorders associated with chronic diseases.
CC   The proteins can also be used as immunogens to produce antibodies and as
CC   vaccines. The sequences may further be used in chromosome mapping,
CC   identifying individual from minute biological samples (tissue typing),
CC   and in forensic identification of a biological sample. The present
CC   sequence encodes human NOV8a from the present invention.
XX
SQ   Sequence 2422 BP; 596 A; 712 C; 692 G; 422 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 43;  DB 1;  Length 2422;
  Best Local Similarity   58.0%;  Pred. No. 0.0001;
  Matches   76;  Conservative    0;  Mismatches   55;  Indels    0;  Gaps    0;

Qy       1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
             ||| | | | |   || |       | |  |  | |   |||||     |    |  ||
Db       1946 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1887

Qy       1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613
             ||||||  |  |||||||||  | | | ||||||||||  |   | ||||||||||||||
Db       1886 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1827

Qy       1614 TCTGTGTCTGT 1624
             ||  ||| |||
Db       1826 TCCATGTGTGT 1816


RESULT 6
AAX15425/c
ID   AAX15425 standard; DNA; 2462 BP.
XX
AC   AAX15425;
XX
DT   05-MAY-1999  (first entry)
XX
DE   DNA encoding coagulation factor VII/VIIa.
XX
KW   Truncated tissue factor; tissue factor binding ligand; coagulation;
KW   disease-associated vasculature; tumour; benign prostatic hyperplasia;
KW   diabetic-retinopathy; vascular restenosis; arteriovenous malformation;
KW   AVM; meningioma; hemangioma; neovascular glaucoma; psoriasis; synovitis;
KW   dermatitis; endometriosis; angiofibroma; rheumatoid arthritis;
KW   atherosclerotic plaque; corneal graft neovascularisation;
KW   haemophilic joint; hypertrophic scar; Osler-Weber syndrome;
```

KW pyogenic granuloma retrolental fibroplasia; scleroderma; trachoma;
KW vascular adhesion; coagulation factor; factor VII/VIIa; ss.
XX
OS Homo sapiens.
XX
PN US5877289-A.
XX
PD 02-MAR-1999.
XX
PF 07-JUN-1995; 95US-00479733.
XX
PR 05-MAR-1992; 92US-00846349.
PR 02-MAR-1994; 94US-00205330.
PR 11-JUL-1994; 94US-00273567.
XX
PA (SCRI) SCRIPPS RES INST.
PA (TEXA) UNIV TEXAS SYSTEM.
XX
PI Edgington TS, Thorpe PE;
XX
DR WPI; 1999-189722/16.
XX
PT Tissue factor binding ligands - comprising first binding region which
PT binds to vasculature, particularly of tumours, and tissue factor
PT construct.
XX
PS Example 9; Col 125-128; 83pp; English.
XX
CC The present sequence encodes a coagulation factor. The specification
CC describes tissue factor binding ligands which comprise a binding region
CC which binds to vasculature, particularly of tumours, and a tissue factor
CC construct. The binding ligands can be used for stimulating coagulation in
CC disease-associated vasculature, particularly for the treatment of
CC tumours. The products can also be used for treating e.g. benign prostatic
CC hyperplasia, diabetic-retinopathy, vascular restenosis, arteriovenous
CC malformations (AVM), meningioma, hemangioma, neovascular glaucoma,
CC psoriasis, synovitis, dermatitis, endometriosis, angiofibroma, rheumatoid
CC arthritis, atheroscelotic plaques, corneal graft neovascularisation,
CC haemophilic joints, hypertrophic scars, Osler-Weber syndrome, pyogenic
CC granuloma retrolental fibroplasia, scleroderma, trachoma, or vascular
CC adhesions. The products can also be used in binding assays
XX
SQ Sequence 2462 BP; 590 A; 724 C; 721 G; 427 T; 0 U; 0 Other;

Query Match 1.6%; Score 43; DB 1; Length 2462;
Best Local Similarity 58.0%; Pred. No. 0.0001;
Matches 76; Conservative 0; Mismatches 55; Indels 0; Gaps 0;

Qy 1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
Db 2007 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1948

Qy 1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613
Db 1947 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1888

Qy 1614 TCTGTGTCTGT 1624
Db 1887 TCCATGTGTGT 1877

RESULT 7
AAA12968/c
ID AAA12968 standard; DNA; 2462 BP.
XX
AC AAA12968;
XX
DT 18-JUL-2000 (first entry)
XX
DE DNA encoding Factor VII/VIIa, SEQ ID NO:25.
XX
KW Truncated tissue factor; tTF; human; blood coagulation;
KW tumour vasculature; bispecific antibody; targetting; cancer;
KW vascularised tumour; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN US6036955-A.
XX
PD 14-MAR-2000.
XX
PF 07-JUN-1995; 95US-00479727.
XX
PR 05-MAR-1992; 92US-00846349.
PR 02-MAR-1994; 94US-00205330.
PR 11-JUL-1994; 94US-00273567.
XX
PA (TEXA) UNIV TEXAS SYSTEM.
PA (SCRI) SCRIPPS RES INST.
XX
PI Edgington TS, Thorpe PE;
XX
DR WPI; 2000-269871/23.
XX
PT Kit for inducing coagulation in tumor vasculature, useful for treating
PT malignant or benign growths, contains ligand, linked to coagulation
PT agent, that targets tumor marker.
XX
PS Example 9; Col 127-130; 86pp; English.
XX
CC The invention relates to the induction of blood coagulation specifically
CC within tumour vasculature. This is achieved by the use of a bispecific
CC molecule, which comprises a region capable of binding to intratumoral
CC vascular or stromal cells linked to a coagulation factor or to a region
CC capable of binding to a coagulation factor. An example of such a
CC bispecific molecule is a bispecific antibody, where one arm binds a
CC tumour antigen, and the other arm binds a coagulation factor. The
CC expression of certain proteins (tumour antigens) is upregulated in tumour
CC vasculature; such proteins include vascular endothelial growth factor
CC (VEGF) and members of the fibroblast growth factor (FGF) family. An
CC antibody or antibody fragment against VEGF or basic FGF (bFGF) may be
CC incorporated into the bispecific molecule in order to target coagulation
CC to tumour vasculature. The coagulation factor-binding portion of the
CC bispecific molecule may be, for example, directed to tissue factor (TF).
CC A preferred form of TF used in the invention is a truncated form (tTF,
CC AAY81488) which lacks the cytoplasmic and transmembrane domains. Although
CC tTF can associate with Factor VIIa, the tTF/Factor VIIa complex cannot
CC alone initiate the coagulation cascade as the complex has to be
CC associated with a phospholipid surface for coagulation to occur. However,
CC binding of tTF to tumour vasculature via a tumour antigen/tTF bispecific
CC antibody brings tTF into close enough proximity with the cell membrane to
CC enable the initiation of coagulation. Kits for the induction of tumour
CC vasculature-specific coagulation may be used to treat malignant or benign
CC diseases associated with a vascular component, particularly cancers, but
CC also benign growths, prostatic hypertrophy, restenosis, psoriasis,
CC glaucoma, rheumatoid arthritis. Coagulation is induced selectively in the
CC tumour vasculature, minimising side effects. Such kits are likely to be
CC effective against many different types of cancer. Sequences AAA12945-
CC AAA12952, AAA12954-A12963 and AAA12971-A12972 represent PCR primers used
CC in exemplifications of the present invention to generate constructs
CC encoding tTF, tTF variants or tTF dimers
XX
SQ Sequence 2462 BP; 590 A; 724 C; 721 G; 427 T; 0 U; 0 Other;

Query Match 1.6%; Score 43; DB 1; Length 2462;
Best Local Similarity 58.0%; Pred. No. 0.0001;
Matches 76; Conservative 0; Mismatches 55; Indels 0; Gaps 0;

Qy 1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
Db 2007 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1948

Qy 1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613
Db 1947 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1888

```
Qy       1614 TCTGTGTCTGT 1624
              ||  ||| |||
Db       1887 TCCATGTGTGT 1877
```

RESULT 8
AAZ56118/c
ID AAZ56118 standard; DNA; 2462 BP.
XX
AC AAZ56118;
XX
DT 15-SEP-2003 (revised)
DT 27-MAR-2000 (first entry)
XX
DE Vitamin-K-dependent coagulation factor VII/VIIa coding sequence.
XX
KW Vitamin-K-dependent coagulation factor; tumour associated vasculature;
KW carcinoma; benign prostatic hyperplasia; diabetic retinopathy;
KW vascular restenosis; arteriovenous malformation; meningoma; haemangioma;
KW neovascular glaucoma; psoriasis; cytostatic; antidiabetic; vasotropic;
KW ophthalmological; antipsoriatic; factor VII/VIIa; ss.
XX
OS unidentified.
XX
PN US6004555-A.
XX
PD 21-DEC-1999.
XX
PF 07-JUN-1995; 95US-00487427.
XX
PR 05-MAR-1992; 92US-00846349.
PR 02-MAR-1994; 94US-00205330.
PR 11-JUL-1994; 94US-00273567.
XX
PA (SCRI) SCRIPPS RES INST.
PA (TEXA) UNIV TEXAS SYSTEM.
XX
PI Edgington TS, Thorpe PE;
XX
DR WPI; 2000-072047/06.
XX
PT Bispecific binding ligands for promoting blood coagulation in a tumor
PT associated vasculature are useful for treating cancer.
XX
PS Example 9; Col 127-130; 83pp; English.
XX
CC This is the coding sequence for Factor VII/VIIa, a vitamin-K-dependent
CC coagulation factor. This coagulation factor can be used in the formation
CC of coaguligands. Mutated versions of this sequence can be used in the
CC method for delivering a coagulant to a tumour-associated vasculature
CC using bispecific binding ligands which promote blood coagulation. The
CC binding ligand consists of a binding region that binds to a surface-
CC expressed, surface accessible or surface-localised component of a tumour
CC cell, intratumoural vasculature or tumour associated stroma. The binding
CC region is linked to a coagulating agent which is a coagulation factor
CC (e.g. tissue factor). The second binding region comprises an antibody or
CC an antigen binding region of an antibody. The method is used for
CC delivering an exogenous or an endogenous coagulation factor to tumour-
CC associated vasculature which is benign or malignant. The method can be
CC used to treat cancer by promoting specific blood coagulation in the
CC vasculature of the tumour relative to the vasculature in nontumour sites.
CC Vascularised tumours are usually solid tumours, particularly carcinomas
CC which require a vascular component to provide oxygen and nutrients. The
CC ligands are suitable to treat benign and malignant diseases with a
CC vascular component, including benign prostatic hyperplasia, diabetic
CC retinopathy, vascular restenosis, arteriovenous malformations,
CC meningioma, haemangioma, neovascular glaucoma and psoriasis. The ligands
CC can also be used in standard binding assays in vitro. Bispecific ligands
CC can be designed which are capable of binding to vascular endothelial
CC cells and disease-associated agents such as activated platelets. Certain
CC disease-associated agents are similar in different diseases and in
CC different tumours, making it possible to treat numerous diseases and
CC different types of cancer with one pharmaceutical, therefore an agent
CC does not need to be tailored to each individual disease or specific
CC tumour type. (Updated on 15-SEP-2003 to standardise OS field)
XX
SQ Sequence 2462 BP; 590 A; 724 C; 721 G; 427 T; 0 U; 0 Other;

```
  Query Match             1.6%;  Score 43;  DB 1;  Length 2462;
  Best Local Similarity   58.0%;  Pred. No. 0.0001;
  Matches   76;  Conservative    0;  Mismatches   55;  Indels    0;  Gaps    0;

Qy       1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
              |||  |  |  |   ||  |      |  |   |  |  |||||     |    |  ||
Db       2007 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1948

Qy       1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613
              ||||||  |  |||||||||  | | | ||||||||||  |  | ||||||||||||
Db       1947 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1888

Qy       1614 TCTGTGTCTGT 1624
              ||  ||| |||
Db       1887 TCCATGTGTGT 1877
```

RESULT 9
AAA54032/c
ID AAA54032 standard; DNA; 2462 BP.
XX
AC AAA54032;
XX
DT 08-FEB-2001 (first entry)
XX
DE Human factor VII coding sequence.
XX
KW Vitamin K dependent protein; VKDP; gamma-carboxylation; chimeric protein;
KW fusion protein; coagulation factor; Factor X; Factor VII; Protein S;
KW Factor IX; Protein C; prothrombin; blood clotting; haemophilia; human;
KW ds.
XX
OS Homo sapiens.
XX
PN WO200054787-A1.
XX
PD 21-SEP-2000.
XX
PF 16-MAR-2000; 2000WO-US006934.
XX
PR 16-MAR-1999; 99US-0124609P.
XX
PA (CHIL-) CHILDRENS HOSPITAL PHILADELPHIA.
PA (UYNC-) UNIV NORTH CAROLINA.
XX
PI High KA, Camire RM, Larson PJ, Stafford DW;
XX
DR WPI; 2000-638152/61.
XX
PT Chimeric DNA for optimizing gamma carboxylation of vitamin K-dependent
PT protein useful for treating diseases associated with the protein,
PT comprises sequence encoding propeptide fused to sequence encoding the
PT protein.
XX
PS Disclosure; Fig 6Bi-ii; 60pp; English.
XX
CC Efficient processing and release of mature two-chain factor X into the
CC circulation requires: removal of the signal sequence; formation of
CC disulfide bonds; modification of amino terminal glutamic acid residues,
CC to gamma-carboxyglutamic acid; modification of one aspartic acid in the
CC first epidermal growth factor (EGF) domain to Beta-hydroxyaspartic acid;
CC addition of N- and O-linked oligosaccharides to the activation peptide;
CC removal of an internal tripeptide to yield two-chain factor X and removal
CC of the propeptide just prior to secretion. While some of these
CC modifications do not appear essential for factor X function the removal
CC of the signal sequence, propeptide, internal tripeptide and full gamma-
CC carboxylation are all steps which are important requisites for the
CC production of biologically active factor X/FXa. Isolated chimeric

```
CC   polynucleotides are described which encode a propeptide fused to a
CC   nucleic acid sequence encoding a vitamin K-dependent protein (VKDP). The
CC   fusion proteins encoded are vitamin K-dependent protein gamma-
CC   carboxylation enhancers and are useful for optimising the gamma-
CC   carboxylation of a VKDP to produce a fully gamma-carboxylated VKDP. The
CC   fusion proteins and recombinant cells expressing them are useful for
CC   alleviating a VKDP associated disease. The fusion constructs result in
CC   the production of fully gamma-carboxylated mature VKDPs, which are
CC   biologically active. The invention encompasses all combinations of
CC   propeptide sequences (modified or not) and VKDP's. This sequence encodes
CC   the signal, propeptide and mature protein sequence of human Factor VII
XX
SQ   Sequence 2462 BP; 590 A; 724 C; 721 G; 427 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 43;  DB 1;  Length 2462;
  Best Local Similarity   58.0%;  Pred. No. 0.0001;
  Matches   76;  Conservative    0;  Mismatches   55;  Indels    0;  Gaps    0;

Qy       1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
             |||  | |  | |   || |      | |  |  | |   |||||     |    |  ||
Db       2007 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1948

Qy       1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613
             ||||||  |  |||||||||  | | | ||||||||||  |  | ||||||||||||||
Db       1947 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1888

Qy       1614 TCTGTGTCTGT 1624
             ||  |||  |||
Db       1887 TCCATGTGTGT 1877


RESULT 10
AAA89784/c
ID   AAA89784 standard; DNA; 2462 BP.
XX
AC   AAA89784;
XX
DT   14-DEC-2000  (first entry)
XX
DE   DNA encoding coagulation factor VII/VIIa.
XX
KW   Tissue factor protein; truncated tissue factor; tTF; cytostatic;
KW   coagulant; diabetic retinopathy; arteriovenous malformation; meningioma;
KW   hemangioma; neovascular glaucoma; psoriasis; synovitis; endometriosis;
KW   hemophylic joint; hypertrophic scar; vascular adhesion; tumour; cancer;
KW   ligand; human; factor VII; ds.
XX
OS   Homo sapiens.
XX
PN   US6093399-A.
XX
PD   25-JUL-2000.
XX
PF   07-JUN-1995;   95US-00482369.
XX
PR   05-MAR-1992;   92US-00846349.
PR   02-MAR-1994;   94US-00205330.
PR   11-JUL-1994;   94US-00273567.
XX
PA   (SCRI ) SCRIPPS RES INST.
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Edgington TS,  Thorpe PE;
XX
DR   WPI; 2000-531471/48.
XX
PT   New immunological and growth factor-based bispecific binding ligands,
PT   useful for stimulating coagulation in vasculature-associated diseases,
PT   e.g. for treating both benign and malignant diseases (e.g. meningioma or
PT   hemangioma).
XX
PS   Example 9; Col 125-128; 83pp; English.
XX
CC   The present invention relates to a binding ligand with a first binding
CC   region that is operatively linked to either a coagulation factor or a
CC   second binding region that binds to a coagulation factor. The first
CC   binding region binds to a component on the surface of a tumour. The
CC   second binding region is all or part of an antibody. An example of a
CC   coagulation factor for use in the invention is human truncated tissue
CC   factor. Truncated tissue factor (tTF) is the extracellular domain of the
CC   mature tissue factor protein (see AAB15019). The binding ligand of the
CC   invention is useful for stimulating coagulation in vasculature associated
CC   diseases. Particularly, the binding ligand is useful for treating both
CC   benign and malignant diseases that have a vascular component. These
CC   diseases include benign growths (e.g. BPH), diabetic retinopathy,
CC   arteriovenous malformations, meningioma, hemangioma, neovascular
CC   glaucoma, psoriasis, synovitis, endometriosis, hemophylic joints,
CC   hypertrophic scars or vascular adhesions. The present binding ligands
CC   offer the advantage that even limited damage to the tumour vasculature
CC   could produce an avalanche of tumour cell death because each capillary
CC   provides oxygen and nutrients for thousands of tumour cells. The present
CC   sequence is DNA encoding coagulation factor VII/VIIa. This factor was
CC   used in the invention
XX
SQ   Sequence 2462 BP; 590 A; 724 C; 721 G; 427 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 43;  DB 1;  Length 2462;
  Best Local Similarity   58.0%;  Pred. No. 0.0001;
  Matches   76;  Conservative    0;  Mismatches   55;  Indels    0;  Gaps    0;

Qy       1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
             |||  | |  | |   || |      | |  |  | |   |||||     |    |  ||
Db       2007 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1948

Qy       1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613
             ||||||  |  |||||||||  | | | ||||||||||  |  | ||||||||||||||
Db       1947 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1888

Qy       1614 TCTGTGTCTGT 1624
             ||  |||  |||
Db       1887 TCCATGTGTGT 1877


RESULT 11
ABL67255/c
ID   ABL67255 standard; DNA; 2462 BP.
XX
AC   ABL67255;
XX
DT   15-MAY-2002  (first entry)
XX
DE   Thyroid cancer related gene sequence SEQ ID NO:5592.
XX
KW   Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
KW   stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
KW   cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
KW   gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO200194629-A2.
XX
PD   13-DEC-2001.
XX
PF   30-MAY-2001; 2001WO-US010838.
XX
PR   05-JUN-2000; 2000US-0209473P.
PR   05-JUN-2000; 2000US-0209531P.
PR   18-SEP-2000; 2000US-0233133P.
PR   18-SEP-2000; 2000US-0233617P.
PR   20-SEP-2000; 2000US-0234009P.
PR   20-SEP-2000; 2000US-0234034P.
PR   20-SEP-2000; 2000US-0234052P.
PR   22-SEP-2000; 2000US-0234509P.
PR   22-SEP-2000; 2000US-0234567P.
PR   25-SEP-2000; 2000US-0234923P.
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PR   25-SEP-2000; 2000US-0234924P.
PR   25-SEP-2000; 2000US-0235077P.
PR   25-SEP-2000; 2000US-0235082P.
PR   25-SEP-2000; 2000US-0235134P.
PR   25-SEP-2000; 2000US-0235280P.
PR   26-SEP-2000; 2000US-0235637P.
PR   26-SEP-2000; 2000US-0235638P.
PR   27-SEP-2000; 2000US-0235711P.
PR   27-SEP-2000; 2000US-0235720P.
PR   27-SEP-2000; 2000US-0235840P.
PR   27-SEP-2000; 2000US-0235863P.
PR   28-SEP-2000; 2000US-0236028P.
PR   28-SEP-2000; 2000US-0236032P.
PR   28-SEP-2000; 2000US-0236033P.
PR   28-SEP-2000; 2000US-0236034P.
PR   28-SEP-2000; 2000US-0236109P.
PR   28-SEP-2000; 2000US-0236111P.
PR   29-SEP-2000; 2000US-0236842P.
PR   29-SEP-2000; 2000US-0236891P.
PR   02-OCT-2000; 2000US-0237172P.
PR   02-OCT-2000; 2000US-0237173P.
PR   02-OCT-2000; 2000US-0237278P.
PR   02-OCT-2000; 2000US-0237294P.
PR   02-OCT-2000; 2000US-0237295P.
PR   02-OCT-2000; 2000US-0237316P.
PR   03-OCT-2000; 2000US-0237425P.
PR   03-OCT-2000; 2000US-0237598P.
PR   03-OCT-2000; 2000US-0237604P.
PR   03-OCT-2000; 2000US-0237606P.
PR   03-OCT-2000; 2000US-0237608P.
PR   01-NOV-2000; 2000US-0244867P.
PR   01-NOV-2000; 2000US-0245084P.
XX
PA   (AVAL-) AVALON PHARM.
XX
PI   Young PE, Augustus M, Carter KC, Ebner R, Endress G, Horrigan S;
PI   Soppet DR, Weaver Z;
XX
DR   WPI; 2002-188264/24.
XX
PT   Screening for anti-neoplastic agent involves exposing cells to a chemical
PT   agent to be tested for anti-neoplastic activity, and determining a change
PT   in expression of a gene of a signature gene set.
XX
PS   Claim 1; SEQ ID NO 5592; 44pp; English.
XX
CC   The present invention describes a method (M1) for screening for an anti-
CC   neoplastic agent. The method involves exposing cells to a chemical agent
CC   to be tested for anti-neoplastic activity, determining a change in
CC   expression of at least one gene (I) of a signature gene set, where (I)
CC   comprises a sequence (S) selected from 8447 sequences (given in ABL61664
CC   to ABL70110), or is at least 95% identical to (S), where a change in
CC   expression is indicative of anti-neoplastic activity. (I) has cytostatic
CC   activity and can be used in gene therapy. M1 can be used for screening an
CC   anti-neoplastic agent, and can be used for producing a product which is
CC   the data collected with respect to the anti-neoplastic agent as a result
CC   of M1, and the data is sufficient to convey the chemical structure and/or
CC   properties of the agent. M1 can be used in the treatment of cancer such
CC   as colon, breast, stomach, lung, thyroid, oesophageal, ovarian, kidney,
CC   prostate or pancreatic cancer, adenocarcinoma, carcinoma, clear cell
CC   cancer, infiltrating ductal cancer, infiltrating lobular cancer, squamous
CC   cell carcinoma, neuroendocrine carcinoma, papillary carcinoma and Wilm's
CC   tumour
XX
SQ   Sequence 2462 BP; 590 A; 724 C; 721 G; 427 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 43;  DB 1;  Length 2462;
  Best Local Similarity   58.0%;  Pred. No. 0.0001;
  Matches   76;  Conservative    0;  Mismatches   55;  Indels    0;  Gaps    0;

Qy       1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
             ||| | | | | || | | | | | |||||     |   | ||
Db       2007 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1948

Qy       1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613
             ||||||  |  |||||||||  | | | ||||||||||  |  | |||||||||||||
Db       1947 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1888

Qy       1614 TCTGTGTCTGT 1624
             ||  ||| |||
Db       1887 TCCATGTGTGT 1877


RESULT 12
ABN95753/c
ID   ABN95753 standard; DNA; 2462 BP.
XX
AC   ABN95753;
XX
DT   13-AUG-2002  (first entry)
XX
DE   Gene #2251 used to diagnose liver cancer.
XX
KW   Gene; liver cancer; ds; hepatocellular carcinoma; hepatotropic;
KW   metastatic liver tumour; cytostatic; expression profile; disease state;
KW   disease progression; drug toxicity; drug efficacy; drug metabolism.
XX
OS   Homo sapiens.
XX
PN   WO200229103-A2.
XX
PD   11-APR-2002.
XX
PF   02-OCT-2001; 2001WO-US030589.
XX
PR   02-OCT-2000; 2000US-0237054P.
XX
PA   (GENE-) GENE LOGIC INC.
XX
PI   Horne D, Alvares C, Peres-Da-Silva S, Vockley JG;
XX
DR   WPI; 2002-426119/45.
XX
PT   Diagnosing and detecting the progression of liver cancer, hepatocellular
PT   carcinoma or metastatic liver tumor in a patient, involves detecting the
PT   level of expression of two or more genes in a liver tissue sample.
XX
PS   Claim 1; SEQ ID NO 2251; 298pp; English.
XX
CC   The invention relates to a novel method for diagnosing and detecting the
CC   progression of liver cancer, hepatocellular carcinoma or metastatic liver
CC   tumour in a patient, and differentiating metastatic liver cancer from
CC   hepatocellular carcinoma in a patient, involving detecting the level of
CC   expression of two or more genes represented in ABN93503-ABN97455 in a
CC   tissue sample. The method of the invention has hepatotropic, and
CC   cytostatic activity. The method is useful for diagnosing and detecting
CC   the progression of liver cancer, hepatocellular carcinoma and metastatic
CC   liver carcinoma in a patient. The method is useful for identifying
CC   expression profiles which serve as useful diagnostic markers as well as
CC   markers that can be used to monitor disease states, disease progression,
CC   drug toxicity, drug efficacy and drug metabolism. Note: The sequence data
CC   for this patent did not form part of the printed specification, but was
CC   obtained in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 2462 BP; 590 A; 724 C; 721 G; 427 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 43;  DB 1;  Length 2462;
  Best Local Similarity   58.0%;  Pred. No. 0.0001;
  Matches   76;  Conservative    0;  Mismatches   55;  Indels    0;  Gaps    0;

Qy       1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
             ||| | | | | || | | | | | |||||     |   | ||
Db       2007 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1948

Qy       1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613
```

```
Db       1947 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1888

Qy       1614 TCTGTGTCTGT 1624
Db       1887 TCCATGTGTGT 1877
```

RESULT 13
AAN60064/c
ID AAN60064 standard; DNA; 2483 BP.
XX
AC AAN60064;
XX
DT 25-MAR-2003 (revised)
DT 31-OCT-2002 (revised)
DT 23-MAY-1991 (first entry)
XX
DE Factor VII cDNA of lambda VII2463.
XX
KW Factor VII; Factor VIIa; DNA construct.
XX
OS Unidentified.
XX
FH Key Location/Qualifiers
FT CDS 36. .1436
FT /*tag= a
XX
PN EP200421-A.
XX
PD 10-DEC-1986.
XX
PF 16-APR-1986; 86EP-00302855.
XX
PR 17-APR-1985; 85US-00724311.
PR 16-DEC-1985; 85US-00810002.
XX
PA (ZYMO) ZYMOGENETICS INC.
XX
PI Hagen FS, Murry MJ, Berkner KL, Insley MY, Woodbury RG, Gray CL;
XX
DR WPI; 1986-326899/50.
DR P-PSDB; AAP60056.
XX
PT DNA construct used to transfect hosts - to produce protein which
PT activates to give factor VIIa.
XX
PS Disclosure; Fig 1B; 55pp; English.
XX
CC The partial factor VII cDNA sequence is from cDNA clonl lambda VII2463.
CC It is used in a DNA construct which contains a nucleotide sequence
CC encoding a protein which, on activation, has the same biological activity
CC for blood coagulation as Factor IIa. The nucleotide codes at least
CC partially for Factor VII and comprises sequence encoding a calcium
CC binding domain joined to a sceond sequence downstream of this encoding a
CC catalytic domain for the serine protease activity of Factor VIIa. The
CC calcium binding domain comprises a gene encoding Factor VII, IX, X,
CC Protein C, prothrombin or Protein S. The construct is used to transfect
CC host cells to produce the protein which, on activation, yields Factor
CC VIIa. (Updated on 31-OCT-2002 to add missing OS field.) (Updated on 25-
CC MAR-2003 to correct PA field.)
XX
SQ Sequence 2483 BP; 611 A; 725 C; 720 G; 427 T; 0 U; 0 Other;

Query Match 1.6%; Score 43; DB 1; Length 2483;
Best Local Similarity 58.0%; Pred. No. 0.00011;
Matches 76; Conservative 0; Mismatches 55; Indels 0; Gaps 0;

```
Qy       1494 TGTTGAGAATTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTG 1553
Db       2007 TGTGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTATCTCTGTGTGACCATCTG 1948

Qy       1554 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTG 1613
```

```
Db       1947 TGTGTGCATCCGTGTGTGTGCATATCTCTGTGTGTGTGCATTGGCGTGTGTGTGTGTGCA 1888

Qy       1614 TCTGTGTCTGT 1624
Db       1887 TCCATGTGTGT 1877
```

RESULT 14
AAN60063/c
ID AAN60063 standard; cDNA; 2177 BP.
XX
AC AAN60063;
XX
DT 25-MAR-2003 (revised)
DT 31-OCT-2002 (revised)
DT 23-MAY-1991 (first entry)
XX
DE Partial Factor VII cDNA.
XX
KW Factor VII; Factor VIIa; DNA construct.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT CDS 13. .1128
FT /*tag= a
XX
PN EP200421-A.
XX
PD 10-DEC-1986.
XX
PF 16-APR-1986; 86EP-00302855.
XX
PR 17-APR-1985; 85US-00724311.
PR 16-DEC-1985; 85US-00810002.
XX
PA (ZYMO) ZYMOGENETICS INC.
XX
PI Hagen FS, Murry MJ, Berkner KL, Insley MY, Woodbury RG, Gray CL;
XX
DR WPI; 1986-326899/50.
DR P-PSDB; AAP60055.
XX
PT DNA construct used to transfect hosts - to produce protein which
PT activates to give factor VIIa.
XX
PS Disclosure; Fig 1A; 55pp; English.
XX
CC The partial factor VII cDNA sequence is produced by joining portions of
CC cDNA clones lambda VII2115 and lambda VII1923. It is used in a DNA
CC construct which contains a nucleotide sequence encoding a protein which,
CC on activation, has the same biological activity for blood coagulation as
CC Factor IIa. The nucleotide codes at least partially for Factor VII and
CC comprises a sequence encoding a calcium binding domain joined to a sceond
CC sequence downstream of this encoding a catalytic domain for the serine
CC protease activity of Factor VIIa. The calcium binding domain comprises a
CC gene encoding Factor VII, IX, X, Protein C, prothrombin or Protein S. The
CC construct is used to transfect host cells to produce the protein which,
CC on activation, yields Factor VIIa. (Updated on 31-OCT-2002 to add missing
CC OS field.) (Updated on 25-MAR-2003 to correct PA field.)
XX
SQ Sequence 2177 BP; 569 A; 624 C; 605 G; 379 T; 0 U; 0 Other;

Query Match 1.5%; Score 41.6; DB 1; Length 2177;
Best Local Similarity 57.8%; Pred. No. 0.00025;
Matches 74; Conservative 0; Mismatches 54; Indels 0; Gaps 0;

```
Qy       1516 GTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTGTGTGTGTGTGTGTGTGTGTG 1575
Db       1755 GTGTGCGTGCATTGGCATGTGCGTGCACTCCATGTGTATATCTGTGTGTGCATCTGTGTG 1696

Qy       1576 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTCTGTGTCTGTGTCTTGTGTGT 1635
```

```
Db       1695 TGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTACTCTGTGTGACCATCTGTGT 1636

Qy       1636 CTGTGTTC 1643
              ||  | |
Db       1635 GTGCATCC 1628
```

RESULT 15
AAN60065/c
ID AAN60065 standard; DNA; 2438 BP.
XX
AC AAN60065;
XX
DT 25-MAR-2003 (revised)
DT 31-OCT-2002 (revised)
DT 23-MAY-1991 (first entry)
XX
DE Factor IX/Factor VII cDNA fusion.
XX
KW Factor VII; Factor IX; DNA construct.
XX
OS Unidentified.
XX
FH Key   Location/Qualifiers
FT CDS   7. .1368
FT   /*tag= a
XX
PN EP200421-A.
XX
PD 10-DEC-1986.
XX
PF 16-APR-1986; 86EP-00302855.
XX
PR 17-APR-1985; 85US-00724311.
PR 16-DEC-1985; 85US-00810002.
XX
PA (ZYMO) ZYMOGENETICS INC.
XX
PI Hagen FS, Murry MJ, Berkner KL, Insley MY, Woodbury RG, Gray CL;
XX
DR WPI; 1986-326899/50.
DR P-PSDB; AAP60057.
XX
PT DNA construct used to transfect hosts - to produce protein which
PT activates to give factor VIIa.
XX
PS Disclosure; Fig 7; 55pp; English.
XX
CC The cDNA is a fusion of Factor IX and Factor VII. It is used to express
CC Factor IX and Factor VII. cDNA encoding Factor VII can be used in DNA
CC construct which contains a nucleotide sequence encoding a protein which,
CC on activation, has the same biological activity for blood coagulation as
CC Factor IIa. The nucleotide codes at least partially for Factor VII and
CC comprises a sequence encoding a calcium binding domain joined to a sceond
CC sequence downstream of this encoding a catalytic domain for the serine
CC protease activity of Factor VIIa. The calcium binding domain comprises a
CC gene encoding Factor VII, IX, X, Protein C, prothrombin or Protein S. The
CC construct is used to transfect host cells to produce the protein which,
CC on activation, yields Factor VIIa. (Updated on 31-OCT-2002 to add missing
CC OS field.) (Updated on 25-MAR-2003 to correct PA field.)
XX
SQ Sequence 2438 BP; 658 A; 670 C; 666 G; 444 T; 0 U; 0 Other;

  Query Match   1.5%; Score 41.6; DB 1; Length 2438;
  Best Local Similarity   57.8%; Pred. No. 0.00026;
  Matches   74; Conservative   0; Mismatches   54; Indels   0; Gaps   0;

```
Qy       1516 GTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTGTGTGTGTGTGTGTGTGTGTGTG 1575
              ||||  ||| |||   |  | ||||||     || | | ||||||||  | ||||||
Db       1995 GTGTGCGTGCATTGGCATGTGCGTGCACTCCATGTGTATATCTGTGTGTGCATCTGTGTG 1936

Qy       1576 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTCTGTGTCTGTGTCTTGTGTGT 1635
```

```
Db       1935 TGCATATCTCTATGTGCGTGTGCATCGGTGTGTTTGCGTACTCTGTGTGACCATCTGTGT 1876

Qy       1636 CTGTGTTC 1643
              ||  | |
Db       1875 GTGCATCC 1868
```

RESULT 16
AAZ12625
ID AAZ12625 standard; cDNA; 300 BP.
XX
AC AAZ12625;
XX
DT 12-OCT-1999 (first entry)
XX
DE Human gene expression product cDNA sequence SEQ ID NO:94.
XX
KW Human; gene; gene expression product; diagnosis; therapy; probe;
KW detection; mapping; tissue typing; profiling; forensic; cancer;
KW genetic analysis; colorectal cancer; breast cancer; lung cancer; ss.
XX
OS Homo sapiens.
XX
PN WO9938972-A2.
XX
PD 05-AUG-1999.
XX
PF 28-JAN-1999; 99WO-US001619.
XX
PR 28-JAN-1998; 98US-0072910P.
PR 24-FEB-1998; 98US-0075954P.
PR 31-MAR-1998; 98US-0080114P.
PR 03-APR-1998; 98US-0080515P.
PR 03-APR-1998; 98US-0080666P.
PR 21-OCT-1998; 98US-0105234P.
PR 28-OCT-1998; 98US-0105877P.
XX
PA (CHIR) CHIRON CORP.
PA (HYSE-) HYSEQ INC.
XX
PI Williams LT, Escobedo J, Innis MA, Garcia PD, Sudduth-Klinger J;
PI Reinhard C, Giese K, Randazzo F, Kennedy GC, Pot D, Kassam A;
PI Lamson G, Drmanac R, Crkvenjakov R, Dickson M, Drmanac S, Labat I;
PI Leshkowitz D, Kita D, Garcia V, Jones WL, Stache-Crain B;
XX
DR WPI; 1999-494092/41.
XX
PT Novel human genes and their expression products which are differentially
PT expressed in different cell types.
XX
PS Claim 1; Page 683; 2479pp; English.
XX
CC The present invention describes a library of human polynucleotides
CC comprising the sequences given in AAZ12532 to AAZ17779. Also described is
CC a method of detecting differentially expressed genes correlated with the
CC cancerous state of a mammalian cell, comprising detecting at least one
CC differentially expressed gene product in a test sample from a cell
CC suspected of being cancerous, where the gene product is encoded by one of
CC the 5248 polynucleotide sequences given in AAZ12532 to AAZ17779. The
CC polynucleotides can be used as a source of primers and probes, which can
CC be used for a variety of purpose, e.g. detection of expression levels,
CC mapping, tissue typing or profiling, forensics, genetic analysis and
CC detection of polymorphisms. Polypeptides encoded by the polynucleotides
CC can be used for raising antibodies for experimental, diagnostic and
CC therapeutic purposes. The polynucleotides may also be used to construct
CC arrays for diagnostics (which may be used to determine function of an
CC encoded protein); and to detect differences in expression levels between
CC two cells (e.g. to identify abnormal or diseased tissue in a human, to
CC identify a genetic predisposition or susceptibility to a disease such as
CC cancer). The polynucleotides of the invention are especially used in the
CC diagnosis, prognosis and management of colorectal cancer, breast cancer,
CC and lung cancer. The polynucleotides can also be used to screen for

```
CC   peptide analogues and antagonists
XX
SQ   Sequence 300 BP; 41 A; 84 C; 105 G; 68 T; 0 U; 2 Other;

  Query Match             1.2%;  Score 32.4;  DB 1;  Length 300;
  Best Local Similarity   78.0%;  Pred. No. 0.051;
  Matches   39;  Conservative    0;  Mismatches   11;  Indels    0;  Gaps    0;

Qy       1539 TGCACTTGTGAAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1588
              | | || | |  ||| |||| ||||| ||||| ||||||||||||||||
Db         89 TCCCCTAGGGCCGTGCCTGTGCGTGTGCGTGTGCGTGTGTGTGTGTGT 138


RESULT 17
AAC16179
ID   AAC16179 standard; cDNA; 254 BP.
XX
AC   AAC16179;
XX
DT   06-OCT-2000  (first entry)
XX
DE   Human secreted protein 5' EST, SEQ ID NO: 20254.
XX
KW   Human; 5' EST; expressed sequence tag; secreted protein; cDNA isolation;
KW   gene therapy; chromosome mapping; ss.
XX
OS   Homo sapiens.
XX
PN   EP1033401-A2.
XX
PD   06-SEP-2000.
XX
PF   21-FEB-2000; 2000EP-00200610.
XX
PR   26-FEB-1999;   99US-0122487P.
XX
PA   (GEST ) GENSET.
XX
PI   Dumas Milne Edwards J,  Duclert A,  Giordano J;
XX
DR   WPI; 2000-500381/45.
XX
PT   New nucleic acid that is a 5' expressed sequence tag (5' EST) for
PT   obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and for
PT   diagnostic, forensic, gene therapy and chromosome mapping procedures.
XX
PS   Claim 1; SEQ ID NO 20254; 71pp + Sequence Listing; English.
XX
CC   The present sequence is one of a large number of 5' ESTs derived from
CC   mRNAs encoding secreted proteins. No ORF has yet been conclusively
CC   identified within the present sequence. The 5' ESTs were prepared from
CC   total human RNAs or polyA+ RNAs derived from 30 different tissues. EST
CC   sequences usually correspond mainly to the 3' untranslated region (UTR)
CC   of the mRNA because they are often obtained from oligo-dT primed cDNA
CC   libraries. Such ESTs are not well suited for isolating cDNA sequences
CC   derived from the 5' ends of mRNAs and even in those cases where longer
CC   cDNA sequences have been obtained, the full 5' UTR is rarely included. 5'
CC   ESTs are derived from mRNAs with intact 5' ends and can therefore be used
CC   to obtain full length cDNAs and genomic DNAs. 5' ESTs are also used in
CC   diagnostic, forensic, gene therapy and chromosome mapping procedures.
CC   They are used to obtain upstream regulatory sequences and to design
CC   expression and secretion vectors
XX
SQ   Sequence 254 BP; 74 A; 54 C; 52 G; 73 T; 0 U; 1 Other;

  Query Match             0.9%;  Score 25.6;  DB 1;  Length 254;
  Best Local Similarity   60.6%;  Pred. No. 4;
  Matches   40;  Conservative    1;  Mismatches   25;  Indels    0;  Gaps    0;

Qy       1450 CCCAGTATCTTTTTCTAGAGAAATTAAGATCATTGAGTCATTGATGTTGAGAATTATCAA 1509
              || ||| |    |||        |||| |||||||||  | |  ||| ||:  | || ||
Db         68 CCAAGTTTGACCTTCACAGCTCATTATGATCATTGATCCTTATATGATGRACCTGATAAA 127

Qy       1510 TGAGCA 1515
              ||||||
Db        128 TGAGCA 133


RESULT 18
AAS68927/c
ID   AAS68927 standard; cDNA; 237 BP.
XX
AC   AAS68927;
XX
DT   13-FEB-2002  (first entry)
XX
DE   DNA encoding novel human diagnostic protein #4731.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US008631.
XX
PR   31-MAR-2000; 2000US-00540217.
PR   23-AUG-2000; 2000US-00649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   P-PSDB; ABG04740.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity.
XX
PS   Claim 1; SEQ ID NO 4731; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC   sequences. (I) is useful as hybridisation probes, polymerase chain
CC   reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC   and in recombinant production of (II). The polynucleotides are also used
CC   in diagnostics as expressed sequence tags for identifying expressed
CC   genes. (I) is useful in gene therapy techniques to restore normal
CC   activity of (II) or to treat disease states involving (II). (II) is
CC   useful for generating antibodies against it, detecting or quantitating a
CC   polypeptide in tissue, as molecular weight markers and as a food
CC   supplement. (II) and its binding partners are useful in medical imaging
CC   of sites expressing (II). (I) and (II) are useful for treating disorders
CC   involving aberrant protein expression or biological activity. The
CC   polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. AAS64197-AAS94564 represent novel human diagnostic
CC   coding sequences of the invention. Note: The sequence data for this
CC   patent did not appear in the printed specification, but was obtained in
CC   electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 237 BP; 97 A; 34 C; 82 G; 24 T; 0 U; 0 Other;

  Query Match             0.9%;  Score 25.4;  DB 1;  Length 237;
  Best Local Similarity   51.3%;  Pred. No. 4.4;
  Matches   59;  Conservative    0;  Mismatches   56;  Indels    0;  Gaps    0;

Qy       1904 CATTTTGAGTTTCTATTGGAAAAGTCAGGTGTAATTCTAATACATCTGCCTTTATATGTT 1963
              ||||||  ||||  |||||      |   | |  |  | |||   |       || |  ||
```

```
Db        236 CATTTTTGGTTTGCATTGGGTTGCTGCTGGGAGAACCAAATGTCTGGCAGCTTCTTGGTC 177

Qy       1964 AATTGGTCTTTTTTCCCTTGCATCTTTTAATATTCTTTCTTTGTTCTATACTTTT 2018
              | |  || ||| ||   | | |||| |  |  |  |||||  |  | | ||| |
Db        176 CAGTAATCCTTTCTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTCT 122
```

RESULT 19
AAA54035/c
ID AAA54035 standard; DNA; 1843 BP.
XX
AC AAA54035;
XX
DT 08-FEB-2001 (first entry)
XX
DE Human protein C coding sequence.
XX
KW Vitamin K dependent protein; VKDP; gamma-carboxylation; chimeric protein;
KW fusion protein; coagulation factor; Factor X; Factor VII; Protein S;
KW Factor IX; Protein C; prothrombin; blood clotting; haemophilia; human;
KW ds.
XX
OS Homo sapiens.
XX
PN WO200054787-A1.
XX
PD 21-SEP-2000.
XX
PF 16-MAR-2000; 2000WO-US006934.
XX
PR 16-MAR-1999; 99US-0124609P.
XX
PA (CHIL-) CHILDRENS HOSPITAL PHILADELPHIA.
PA (UYNC-) UNIV NORTH CAROLINA.
XX
PI High KA, Camire RM, Larson PJ, Stafford DW;
XX
DR WPI; 2000-638152/61.
XX
PT Chimeric DNA for optimizing gamma carboxylation of vitamin K-dependent
PT protein useful for treating diseases associated with the protein,
PT comprises sequence encoding propeptide fused to sequence encoding the
PT protein.
XX
PS Disclosure; Fig 6Ei-ii; 60pp; English.
XX
CC Efficient processing and release of mature two-chain factor X into the
CC circulation requires: removal of the signal sequence; formation of
CC disulfide bonds; modification of amino terminal glutamic acid residues,
CC to gamma-carboxyglutamic acid; modification of one aspartic acid in the
CC first epidermal growth factor (EGF) domain to Beta-hydroxyaspartic acid;
CC addition of N- and O-linked oligosaccharides to the activation peptide;
CC removal of an internal tripeptide to yield two-chain factor X and removal
CC of the propeptide just prior to secretion. While some of these
CC modifications do not appear essential for factor X function the removal
CC of the signal sequence, propeptide, internal tripeptide and full gamma-
CC carboxylation are all steps which are important requisites for the
CC production of biologically active factor X/FXa. Isolated chimeric
CC polynucleotides are described which encode a propeptide fused to a
CC nucleic acid sequence encoding a vitamin K-dependent protein (VKDP). The
CC fusion proteins encoded are vitamin K-dependent protein gamma-
CC carboxylation enhancers and are useful for optimising the gamma-
CC carboxylation of a VKDP to produce a fully gamma-carboxylated VKDP. The
CC fusion proteins and recombinant cells expressing them are useful for
CC alleviating a VKDP associated disease. The fusion constructs result in
CC the production of fully gamma-carboxylated mature VKDPs, which are
CC biologically active. The invention encompasses all combinations of
CC propeptide sequences (modified or not) and VKDP's. This sequence encodes
CC the signal, propeptide and mature protein sequence of human protein C
XX
SQ Sequence 1843 BP; 417 A; 530 C; 564 G; 332 T; 0 U; 0 Other;

Query Match 0.9%; Score 25.2; DB 1; Length 1843;
Best Local Similarity 55.8%; Pred. No. 9.8;
Matches 48; Conservative 0; Mismatches 38; Indels 0; Gaps 0;

```
Qy       1605 GTGTGTGTGTCTGTGTCTGTGTCTTGTGTGTCTGTGTTCTCTCCCCTCTTTTGATTTTTG 1664
              | | | | |   | |   | || || | | | | | || | |   | ||||  |||||
Db       1838 GGGGGGGGGGGCGGGGGGGGGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT 1779

Qy       1665 GCCTGGAATTATTTATTATTCATATT 1690
              | |||   | ||| ||||||  | ||
Db       1778 TCGTGGTTGTGTTTTTTATTCTTTTT 1753
```

RESULT 20
AAF54050/c
ID AAF54050 standard; DNA; 1843 BP.
XX
AC AAF54050;
XX
DT 30-MAR-2001 (first entry)
XX
DE Human protein C gene, SEQ ID NO:49.
XX
KW Age-related gene regulation; gene expression; human protein C; hPC;
KW 5' UTR; 5' untranslated region; age-regulatable expression construct;
KW PEA-3 element; polyoma virus activator 3; antisense therapy;
KW gene therapy; thrombosis; cardiovascular disease; diabetes;
KW Alzheimer's disease; Parkinson's disease; cancer; osteoporosis;
KW osteoarthritis; dementia; ds.
XX
OS Homo sapiens.
XX
PN WO200075279-A2.
XX
PD 14-DEC-2000.
XX
PF 06-JUN-2000; 2000WO-US015728.
XX
PR 09-JUN-1999; 99US-00328925.
XX
PA (UNMI) UNIV MICHIGAN.
XX
PI Kurachi K, Kurachi S;
XX
DR WPI; 2001-061708/07.
XX
PT New regulatory elements that control age-related gene expression, useful
PT in gene therapy and for reducing Factor IX expression.
XX
PS Disclosure; Fig 12; 225pp; English.
XX
CC The invention relates to nucleic acid sequences which regulate gene
CC expression in an age-related manner and/or in a liver-specific manner.
CC The invention identifies regions of the human factor IX (hFIX) gene, and
CC a region of the human protein C (hPC) gene, which are age-related
CC regulatory sequences. The hFIX age-related regulatory sequences are
CC designated AE5' (AAF54016) and AE3' (AAF54017) and are found in the 5'
CC UTR (at position 2164-2165 of AAF54018) and 3' UTR (at position 34383-
CC 35655 of AAF54018) respectively. These elements act synergistically to
CC increase hFIX levels over the lifespan of an individual; however, they
CC can independently exert effects on hFIX mRNA in an age-related manner,
CC with AE5' acting to stabilise hFIX mRNA, and AE3' acting to increase hFIX
CC mRNA levels, over time. AE5' also directs liver-specific expression. The
CC hPC gene age-related regulatory sequence is found in the 5' UTR
CC (AAF54081), and contains two PEA-3 (polyoma virus activator 3) elements
CC 5'-GAGGAAA-3' and 5'-CAGGAAG-3'. The age-related regulatory sequences of
CC the invention, along with their homologues, variants and fragments, may
CC be used in the construction of recombinant expression vectors for the
CC expression of a desired sequence in an age-related fashion in a host
CC cell. Preferred target genes for expression in such age-regulatable
CC expression vectors include those encoding proteins involved in blood
CC coagulation (e.g., the pro-coagulants factor IX and factor VIII, and the
CC anti-coagulants protein C and antithrombin III), human alpha-1-
CC antitrypsin, PEA-3 protein and reporter proteins such as luciferase.

```
CC   Preferred promoters for use in such age-regulatable expression vectors
CC   include the human factor IX promoter, the T7 promoter, the T3 promoter
CC   and the SP6 promoter. The expression vectors of the invention may be used
CC   in gene therapy to provide age- related and/or liver-specific expression
CC   of target genes. Age-regulatable constructs may be used in the treatment
CC   of such age-related conditions such as thrombosis, cardiovascular
CC   disease, diabetes, Alzheimer's disease, Parkinson's disease, cancer,
CC   osteoporosis, osteoarthritis and dementia. Specifically, they may be used
CC   to express factor IX antisense mRNA in the treatment of thrombotic
CC   conditions associated with the natural age-related rise in factor IX
CC   expression. Transgenic cells or animals that contain vectors of the
CC   invention are useful as models of these diseases, in screening for
CC   potential therapeutic agents and for studying normal processes such as
CC   ageing and gene expression. Fragments and homologues of age-related
CC   regulatory sequences, are useful as probes to detect, isolate or identify
CC   other such sequences in samples. The present sequence represents the hPC
CC   gene
XX
SQ   Sequence 1843 BP; 417 A; 530 C; 564 G; 332 T; 0 U; 0 Other;

  Query Match             0.9%;  Score 25.2;  DB 1;  Length 1843;
  Best Local Similarity   55.8%;  Pred. No. 9.8;
  Matches   48;  Conservative    0;  Mismatches   38;  Indels    0;  Gaps    0;

Qy       1605 GTGTGTGTGTCTGTGTCTGTGTCTTGTGTGTCTGTGTTCTCTCCCCTCTTTTGATTTTTG 1664
             | | | | |   | |   | || || | | | | | | || | |    | ||||  |||||
Db       1838 GGGGGGGGGGGCGGGGGGGGGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT 1779

Qy       1665 GCCTGGAATTATTTATTATTCATATT 1690
              | |||   | ||| ||||||| | ||
Db       1778 TCGTGGTTGTGTTTTTTATTCTTTTT 1753


RESULT 21
ABN97175/c
ID   ABN97175 standard; DNA; 1843 BP.
XX
AC   ABN97175;
XX
DT   13-AUG-2002  (first entry)
XX
DE   Gene #3673 used to diagnose liver cancer.
XX
KW   Gene; liver cancer; ds; hepatocellular carcinoma; hepatotropic;
KW   metastatic liver tumour; cytostatic; expression profile; disease state;
KW   disease progression; drug toxicity; drug efficacy; drug metabolism.
XX
OS   Homo sapiens.
XX
PN   WO200229103-A2.
XX
PD   11-APR-2002.
XX
PF   02-OCT-2001; 2001WO-US030589.
XX
PR   02-OCT-2000; 2000US-0237054P.
XX
PA   (GENE-) GENE LOGIC INC.
XX
PI   Horne D,  Alvares C,  Peres-Da-Silva S,  Vockley JG;
XX
DR   WPI; 2002-426119/45.
XX
PT   Diagnosing and detecting the progression of liver cancer, hepatocellular
PT   carcinoma or metastatic liver tumor in a patient, involves detecting the
PT   level of expression of two or more genes in a liver tissue sample.
XX
PS   Claim 1; SEQ ID NO 3673; 298pp; English.
XX
CC   The invention relates to a novel method for diagnosing and detecting the
CC   progression of liver cancer, hepatocellular carcinoma or metastatic liver
CC   tumour in a patient, and differentiating metastatic liver cancer from
CC   hepatocellular carcinoma in a patient, involving detecting the level of
CC   expression of two or more genes represented in ABN93503-ABN97455 in a
CC   tissue sample. The method of the invention has hepatotropic, and
CC   cytostatic activity. The method is useful for diagnosing and detecting
CC   the progression of liver cancer, hepatocellular carcinoma and metastatic
CC   liver carcinoma in a patient. The method is useful for identifying
CC   expression profiles which serve as useful diagnostic markers as well as
CC   markers that can be used to monitor disease states, disease progression,
CC   drug toxicity, drug efficacy and drug metabolism. Note: The sequence data
CC   for this patent did not form part of the printed specification, but was
CC   obtained in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 1843 BP; 417 A; 530 C; 564 G; 332 T; 0 U; 0 Other;

  Query Match             0.9%;  Score 25.2;  DB 1;  Length 1843;
  Best Local Similarity   55.8%;  Pred. No. 9.8;
  Matches   48;  Conservative    0;  Mismatches   38;  Indels    0;  Gaps    0;

Qy       1605 GTGTGTGTGTCTGTGTCTGTGTCTTGTGTGTCTGTGTTCTCTCCCCTCTTTTGATTTTTG 1664
             | | | | |   | |   | || || | | | | | | || | |    | ||||  |||||
Db       1838 GGGGGGGGGGGCGGGGGGGGGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT 1779

Qy       1665 GCCTGGAATTATTTATTATTCATATT 1690
              | |||   | ||| ||||||| | ||
Db       1778 TCGTGGTTGTGTTTTTTATTCTTTTT 1753


RESULT 22
ADC24228
ID   ADC24228 standard; cDNA; 1361 BP.
XX
AC   ADC24228;
XX
DT   18-DEC-2003  (first entry)
XX
DE   Human NOV8b encoding cDNA SEQ ID NO:35.
XX
KW   human; NOVX; cardiant; antiarteriosclerotic; hypotensive; vasotropic;
KW   dermatological; anorectic; immunosuppressive; cytostatic;
KW   antiinfertility; haemostatic; anti-HIV; antiasthmatic; antiinflammatory;
KW   neuroprotective; anabolic; noctropic; antiparkinsonian; gene therapy;
KW   cardiomyopathy; atherosclerosis; hypertension; congenital heart defect;
KW   pulmonary stenosis; scleroderma; obesity; metabolic disturbance; obesity;
KW   transplantation; adrenoleukodystrophy; congenital adrenal hyperplasia;
KW   prostate cancer; diabetes; metabolic disorder; neoplasm; adenocarcinoma;
KW   fertility; haemophilia; graft versus host disease; AIDS;
KW   bronchial asthma; Crohn's disease; multiple sclerosis;
KW   infectious disease; anorexia; neurodegenerative disorder;
KW   Alzheimer's disease; Parkinson's disease; immune disorder;
KW   haematopoietic disorder; dyslipidaemia; wasting disorder; gene; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             45. .1304
FT                   /*tag=  a
FT                   /product= "NOV8b"
XX
PN   WO2003076584-A2.
XX
PD   18-SEP-2003.
XX
PF   06-MAR-2003; 2003WO-US006951.
XX
PR   06-MAR-2002; 2002US-0361974P.
PR   19-MAR-2002; 2002US-0365477P.
PR   22-MAR-2002; 2002US-0366928P.
PR   06-AUG-2002; 2002US-0401661P.
PR   05-MAR-2003; 2003US-00401661.
XX
PA   (CURA-) CURAGEN CORP.
XX
PI   Alsobrook JP,  Burgess CE,  Edinger SR,  Gerlach VL,  Ji W,  Kekuda R;
```

PI Li L, Macdougall JR, Miller CE, Millet I, Patturajan M, Pena CEA;
PI Rieger DK, Sciore P, Shenoy SG, Smithson G, Spytek KA, Stone DJ;
PI Voss EZ, Zhong M;
XX
DR WPI; 2003-722330/68.
DR P-PSDB; ADC24229.
XX
PT New NOVX polypeptides and nucleic acids, useful for diagnosing or
PT treating e.g. cardiomyopathy, atherosclerosis, hypertension, scleroderma,
PT obesity, prostate cancer, AIDS, bronchial asthma, Crohn's disease, or
PT multiple sclerosis.
XX
PS Claim 20; SEQ ID NO 35; 229pp; English.
XX
CC The present invention describes novel human proteins, designated NOVX
CC proteins. The NOVX sequences have cardiant, antiarteriosclerotic,
CC hypotensive, vasotropic, dermatological, anorectic, immunosuppressive,
CC cytostatic, antiinfertility, haemostatic, anti-HIV, antiasthmatic,
CC antiinflammatory, neuroprotective, anabolic, nootropic and
CC antiparkinsonian activities, and can be used in gene therapy. The NOVX
CC sequences can be used as a therapeutic in the manufacture of a medicament
CC for treating a syndrome associated with a human disease, such as a
CC pathology associated with NOVX. The NOVX proteins and nucleic acids
CC encoding them are useful for diagnosing or treating pathologies, diseases
CC or conditions associated with NOVX sequences, including cardiomyopathy,
CC atherosclerosis, hypertension, congenital heart defects, pulmonary
CC stenosis, scleroderma, obesity, metabolic disturbances associated with
CC obesity, transplantation, adrenoleukodystrophy, congenital adrenal
CC hyperplasia, prostate cancer, diabetes, metabolic disorders, neoplasm,
CC adenocarcinoma, fertility, haemophilia, graft versus host disease, AIDS,
CC bronchial asthma, Crohn's disease, multiple sclerosis, infectious
CC disease, anorexia, neurodegenerative disorders (e.g. Alzheimer's disease,
CC or Parkinson's disease), immune disorders, haematopoietic disorders,
CC dyslipidaemias, and wasting disorders associated with chronic diseases.
CC The proteins can also be used as immunogens to produce antibodies and as
CC vaccines. The sequences may further be used in chromosome mapping,
CC identifying individual from minute biological samples (tissue typing),
CC and in forensic identification of a biological sample. The present
CC sequence encodes human NOV8b from the present invention.
XX
SQ Sequence 1361 BP; 270 A; 410 C; 440 G; 241 T; 0 U; 0 Other;

Query Match 0.9%; Score 24.6; DB 1; Length 1361;
Best Local Similarity 50.4%; Pred. No. 13;
Matches 60; Conservative 0; Mismatches 59; Indels 0; Gaps 0;

```
Qy        401 GCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGTGG 460
              ||  || | |||  |||     | | |   |||| |  |  ||||     |   |||
Db        400 GCTCCTGCAAGGACCAGCTCCAGTCCTATATCTGCTTCTGCCTCCCTGCCTTCGAGGGCC 459

Qy        461 GGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTATCTCATACAGAGGATAGCACT 519
              ||  ||| |   |   ||  | |  |||||| | | || ||  |  |||  | || | |
Db        460 GGAACTGTGAGACGCTTGAATATCCATGTGGAAAAATACCTATTCTAGAAAAAAGAAAT 518
```

RESULT 23
ACD97548
ID ACD97548 standard; cDNA; 282 BP.
XX
AC ACD97548;
XX
DT 23-SEP-2003 (first entry)
XX
DE Human colon cancer cell expressed cDNA #5960.
XX
KW Open reading frame detection; genome sequencing; colon cancer;
KW breast cancer; population genome analysis; genetic shift; cancer;
KW antibiotic resistance; antibiotic non-tolerance; congenital disease;
KW agriculture; food crop genome; resistance gene; retrovirus;
KW influenza virus; eukaryotic pathogen detection; trypanosome; Plasmodium;
KW gene; ss.
XX
OS Homo sapiens.
XX
PN US2002155438-A1.
XX
PD 24-OCT-2002.
XX
PF 27-SEP-1999; 99US-00406117.
XX
PR 20-NOV-1998; 98US-00196716.
XX
PA (SIMP/) SIMPSON A J G.
PA (NETO/) NETO E D.
PA (BREN/) BRENTANI R R.
XX
PI Simpson AJG, Neto ED, Brentani RR;
XX
DR WPI; 2003-182626/18.
XX
PT Determining open reading frames of genome of an organism e.g. a human
PT suffering from cancer involves use of single oligonucleotide primer at
PT low stringency for preparing single-stranded cDNA from mRNA of
PT individual.
XX
PS Example 9; Page 850; 959pp; English.
XX
CC The invention describes a method of determining open reading frames in
CC the genome of organism, comprising contacting mRNA from cell of organism
CC with a single oligonucleotide primer (I) at low stringency, preparing
CC single-stranded cDNA by reverse transcribing mRNA with (I), amplifying
CC cDNA , sequencing the product, and repeating the contacting, preparing
CC and amplifying steps with different primers and sequencing resulting
CC nucleic acids. The method is useful for: determining that a known
CC nucleotide sequence from a genome of an organism corresponds to a
CC nucleotide sequence of an open reading frame; for preparing a contig,
CC nucleic acid molecule from a genome of an organism; and for sequencing
CC all or part of a genome of an organism. mRNA is obtained from mammalian
CC or human cell which is associated with a pathological condition e.g. a
CC colon cancer or breast cancer cell. The method is useful for analyses of
CC populations of subjects and can be used to carry out genetic analyses of
CC large or small populations. further, it can be used to study living
CC systems to determine if, e.g. there have been genetic shifts which render
CC an individual or population more or less likely to be afflicted with
CC diseases such as cancer, to determine antibiotic resistance or non-
CC tolerance, and so forth. The method can also be used in the study of
CC congenital diseases, and the risk of affliction to a foetus, as well as
CC the study of whether the conditions are likely to be passed to offspring
CC through ova or sperm. The analyses for pathological conditions can be
CC carried out in all animals, plants, birds, fish, etc. Using this method,
CC in the area of agriculture, for example the genomes of food crops can be
CC studied to determine if resistance genes are present, defects in plant
CC genomes can also be studied in this way. Similarly, the method permits
CC determination of the pathogens which integrate into the genome, such as
CC retroviruses and other integrating viruses such as influenza virus, have
CC undergone shifts or mutations, which may require different approaches to
CC therapy. This method is also applied to eukaryotic pathogens, such as
CC trypanosomes, different types of Plasmodium, etc. The method essentially
CC eliminates sequencing of non-coding portions. This sequence represents a
CC polynucleotide isolated from human colon cancer cell cDNA library
XX
SQ Sequence 282 BP; 37 A; 98 C; 86 G; 61 T; 0 U; 0 Other;

Query Match 0.9%; Score 24.4; DB 1; Length 282;
Best Local Similarity 53.1%; Pred. No. 8.9;
Matches 52; Conservative 0; Mismatches 46; Indels 0; Gaps 0;

```
Qy        300 GCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCAGGCCCAATGATCATGTGG 359
              |||||| |||  | ||||     || ||||  | ||    || |  ||  ||     |||
Db         93 GCAGGGTAGAAGCCCAGGGCCCAGCACCTCAGGGTGGCCTCATGGTCAGAGACGGGATGG 152

Qy        360 TCAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAGAG 397
              |  ||| | || || | |  | ||  |   ||  |   ||
Db        153 TGGGTCACGTGTGTCCTTGGGTGTTCCGCGCGCTGCAG 190
```

```
RESULT 24
AAK45604
ID   AAK45604 standard; DNA; 267 BP.
XX
AC   AAK45604;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human bone marrow expressed single exon probe SEQ ID NO: 20161.
XX
KW   Human; bone marrow expressed exon; gene expression analysis; probe;
KW   microarray; cancer; leukaemia; lymphoma; myeloma; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157276-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US000668.
XX
PR   04-FEB-2000; 2000US-0180312P.
PR   26-MAY-2000; 2000US-0207456P.
PR   30-JUN-2000; 2000US-00608408.
PR   03-AUG-2000; 2000US-00632366.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488900/53.
XX
PT   Human genome-derived single exon nucleic acid probes useful for analyzing
PT   gene expression in human bone marrow.
XX
PS   Example 4; SEQ ID NO 20161; 658pp + Sequence Listing; English.
XX
CC   The present invention provides a number of single exon nucleic acid
CC   probes which are derived from genomic sequences expressed in the human
CC   bone marrow. They can be used to measure gene expression in bone marrow
CC   samples, which may enable the improved diagnosis and treatment of cancers
CC   such as lymphoma, leukaemia and myeloma. The present sequence is one of
CC   the probes of the invention
XX
SQ   Sequence 267 BP; 3 A; 151 C; 4 G; 109 T; 0 U; 0 Other;

  Query Match             0.9%;  Score 24.2;  DB 1;  Length 267;
  Best Local Similarity   45.5%;  Pred. No. 10;
  Matches   86;  Conservative    0;  Mismatches  103;  Indels    0;  Gaps    0;

Qy       2162 CCTGCTTTTGACCTGCCTTCTTCCCCTTCCTCTATTCCTTTGGTTTTTGCATAGTGTCTC 2221
              ||| ||  |   |  |||||| | ||| |  ||  ||||     |  | |      ||
Db         78 CCTTCTCCTCCTCCTCCTTCTCCTCCTCCTCCTTCTCCTCCTCCTCCTTCTCCTCCTCCT 137

Qy       2222 TGGCTTCCTGGATGTTTTATGCCTGGATTATTTTAGACTTAACATTTTCTTTGACCAAGG 2281
              |  | ||||    || |   |||      | |     ||   | || || ||  ||
Db        138 TCTCCTCCTCCTCCTTCTCCTCCTCCTCCTTCTCCTCCTCCTTCTCCTTCTCCTCCT 197

Qy       2282 TATCCATTTCTTCTATCTTGTCTTCACTGCCTGAGATTCTCTCTTCTATCTCTTGTATTC 2341
                |||   || ||   ||   || | | ||    ||     || ||    ||| |  ||
Db        198 CCTCCTCCTCCTCCTCCTCCCCTCCTCCTCCACCTGTTTCTCCTCCTTCTCCTTTTCCTC 257

Qy       2342 TGTCAGTGA 2350
              |  | | ||
Db        258 TTCCTGGGA 266


RESULT 25
AAK19599
ID   AAK19599 standard; DNA; 267 BP.
XX
AC   AAK19599;
XX
DT   05-NOV-2001  (first entry)
XX
DE   Human brain expressed single exon probe SEQ ID NO: 19590.
XX
KW   Human; brain expressed exon; gene expression analysis; probe; microarray;
KW   Alzheimer's disease; multiple sclerosis; schizophrenia; epilepsy; cancer;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   WO200157275-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US000667.
XX
PR   04-FEB-2000; 2000US-0180312P.
PR   26-MAY-2000; 2000US-0207456P.
PR   30-JUN-2000; 2000US-00608408.
PR   03-AUG-2000; 2000US-00632366.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-483446/52.
XX
PT   Single exon nucleic acid probes for analyzing gene expression in human
PT   brains.
XX
PS   Example 4; SEQ ID NO 19590; 650pp + Sequence Listing; English.
XX
CC   The present invention provides a number of single exon nucleic acid
CC   probes which are derived from genomic sequences expressed in the human
CC   brain. They can be used to measure gene expression in brain cell samples,
CC   which may enable the diagnosis and improved treatment of nervous system
CC   diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia,
CC   epilepsy and cancers. The present sequence is one of the probes of the
CC   invention
XX
SQ   Sequence 267 BP; 3 A; 151 C; 4 G; 109 T; 0 U; 0 Other;

  Query Match             0.9%;  Score 24.2;  DB 1;  Length 267;
  Best Local Similarity   45.5%;  Pred. No. 10;
  Matches   86;  Conservative    0;  Mismatches  103;  Indels    0;  Gaps    0;

Qy       2162 CCTGCTTTTGACCTGCCTTCTTCCCCTTCCTCTATTCCTTTGGTTTTTGCATAGTGTCTC 2221
              ||| ||  |   |  |||||| | ||| |  ||  ||||     |  | |      ||
Db         78 CCTTCTCCTCCTCCTCCTTCTCCTCCTCCTCCTTCTCCTCCTCCTCCTTCTCCTCCTCCT 137

Qy       2222 TGGCTTCCTGGATGTTTTATGCCTGGATTATTTTAGACTTAACATTTTCTTTGACCAAGG 2281
              |  | ||||    || |   |||      | |     ||   | || || ||  ||
Db        138 TCTCCTCCTCCTCCTTCTCCTCCTCCTCCTTCTCCTCCTCCTTCTCCTTCTCCTCCT 197

Qy       2282 TATCCATTTCTTCTATCTTGTCTTCACTGCCTGAGATTCTCTCTTCTATCTCTTGTATTC 2341
                |||   || ||   ||   || | | ||    ||     || ||    ||| |  ||
Db        198 CCTCCTCCTCCTCCTCCTCCCCTCCTCCTCCACCTGTTTCTCCTCCTTCTCCTTTTCCTC 257

Qy       2342 TGTCAGTGA 2350
              |  | | ||
Db        258 TTCCTGGGA 266


RESULT 26
ABS45294
ID   ABS45294 standard; DNA; 267 BP.
XX
```

```
AC   ABS45294;
XX
DT   25-FEB-2003  (first entry)
XX
DE   Human liver single exon probe, SEQ ID No 20284.
XX
KW   Human; single exon nucleic acid probe; liver; cirrhosis;
KW   hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW   coronary heart disease; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157273-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US000664.
XX
PR   04-FEB-2000; 2000US-0180312P.
PR   26-MAY-2000; 2000US-0207456P.
PR   30-JUN-2000; 2000US-00608408.
PR   03-AUG-2000; 2000US-00632366.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488898/53.
XX
PT   Human genome-derived single exon nucleic acid probes useful for analyzing
PT   gene expression in human adult liver.
XX
PS   Claim 4; SEQ ID NO 20284; 658pp; English.
XX
CC   The invention relates to a single exon nucleic acid probe (SENP) (I) for
CC   measuring human gene expression in a sample derived from human adult
CC   liver, comprising one of 13109 defined nucleotide sequences given in the
CC   specification (or complements/ fragments). The probe hybridises at high
CC   stringency to a nucleic acid molecule expressed in the human adult liver.
CC   (I) may be used for predicting, measuring and displaying gene expression
CC   in samples derived from human adult liver. The genes identified may be
CC   involved in genetic liver diseases such as cirrhosis,
CC   hyperlipoproteinaemia, hyperlipidaemia and hypercholesterolaemia which is
CC   associated with coronary heart disease. ABS25011-ABS51005 represent human
CC   liver single exon nucleic acid probes of the invention. Note: The
CC   sequence information for this patent does not appear in the printed
CC   specification but was obtained in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 267 BP; 3 A; 151 C; 4 G; 109 T; 0 U; 0 Other;

  Query Match             0.9%;  Score 24.2;  DB 1;  Length 267;
  Best Local Similarity   45.5%;  Pred. No. 10;
  Matches   86;  Conservative    0;  Mismatches  103;  Indels    0;  Gaps    0;

Qy       2162 CCTGCTTTTGACCTGCCTTCTTCCCCTTCCTCTATTCCTTTGGTTTTTGCATAGTGTCTC 2221
             ||| ||  |   |  |||||| | ||| |  ||  ||||     |  | |       ||
Db         78 CCTTCTCCTCCTCCTCCTTCTCCTCCTCCTCCTTCTCCTCCTCCTCCTTCTCCTCCTCCT 137

Qy       2222 TGGCTTCCTGGATGTTTTATGCCTGGATTATTTTAGACTTAACATTTTCTTTGACCAAGG 2281
             |  | ||||     || |   |||      | |      ||   | || || ||  ||
Db        138 TCTCCTCCTCCTCCTTCTCCTCCTCCTCCTTCTCCTCCTCCTCCTTCTCCTTCTCCTCCT 197

Qy       2282 TATCCATTTCTTCTATCTTGTCTTCACTGCCTGAGATTCTCTCTTCTATCTCTTGTATTC 2341
               |||   || ||   ||   || | |  ||     ||    || ||    ||| |  ||
Db        198 CCTCCTCCTCCTCCTCCTCCCCTCCTCCTCCACCTGTTTCTCCTCCTTCTCCTTTTCCTC 257

Qy       2342 TGTCAGTGA 2350
              |  | | ||
Db        258 TTCCTGGGA 266


RESULT 27
ABS19876
ID   ABS19876 standard; DNA; 267 BP.
XX
AC   ABS19876;
XX
DT   19-AUG-2002  (first entry)
XX
DE   Human genome-derived single exon probe ORF from lung SEQ ID No 19867.
XX
KW   Human; ds; single exon probe; asthma; lung cancer; COPD; ILD;
KW   chronic obstructive pulmonary disease; interstitial lung disease;
KW   familial idiopathic pulmonary fibrosis; neurofibromatosis;
KW   tuberous sclerosis; Gaucher's disease; Niemann-Pick disease;
KW   Hermansky-Pudlak syndrome; sarcoidosis; pulmonary haemosiderosis;
KW   pulmonary histiocytosis; lymphangioleiomyomtosis; Karagener syndrome;
KW   pulmonary alveolar proteinosis; fibrocystic pulmonary dysplasia;
KW   primary ciliary dyskinesis; pulmonary hypertension;
KW   hyaline membrane disease; open reading frame; ORF.
XX
OS   Homo sapiens.
XX
PN   WO200186003-A2.
XX
PD   15-NOV-2001.
XX
PF   30-JAN-2001; 2001WO-US000665.
XX
PR   04-FEB-2000; 2000US-0180312P.
PR   26-MAY-2000; 2000US-0207456P.
PR   30-JUN-2000; 2000US-00608408.
PR   03-AUG-2000; 2000US-00632366.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2002-114183/15.
XX
PT   Spatially-addressable set of single exon nucleic acid probes, used to
PT   measure gene expression in human lung samples.
XX
PS   Claim 4; SEQ ID NO 19867; 634pp; English.
XX
CC   The invention relates to a spatially-addressable set of single exon
CC   nucleic acid probes for measuring gene expression in a sample derived
CC   from human lung comprising single exon nucleic acid probes having one of
CC   12614 nucleic acid sequences mentioned in the specification, or their
CC   complements or the 12387 open reading frames derived from the 12614
CC   probes. Also included are a microarray comprising the novel set of probes
CC   ; the novel set of probes which hybridise at high stringency to a nucleic
CC   acid expressed in the human lung; measuring gene expression in a sample
CC   derived from human lung, comprising (a) contacting the array with a
CC   collection of detectably labeled nucleic acids derived from human lung
CC   mRNA, and (b) measuring the label detectably bound to each probe of the
CC   array; identifying exons in a eukaryotic genome, comprising (a)
CC   algorithmically predicting at least one exon from genomic sequences of
CC   the eukaryote; and (b) detecting specific hybridisation of detectably
CC   labeled nucleic acids from eukaryote lung mRNA, to a single exon probe,
CC   having a fragment identical to the predicted exon, the probe is included
CC   in the above mentioned microarray; assigning exons to a single gene,
CC   comprising (a) identifying exons from genomic sequence by the method
CC   above and (b) measuring the expression of each of the exons in several
CC   tissues and/or cell types using hybridisation to a single exon
CC   microarrays having a probe with the exon, where a common pattern of
CC   expression of the exons in the tissues and/or cell types indicates that
CC   the exons should be assigned to a single gene; a peptide comprising one
CC   of 12011 sequences, mentioned in the specification, or encoded by the
```

CC probes/open reading frames (ORF). The probes are used for gene expression
CC analysis, and for identifying exons in a gene, particularly using human
CC lung derived mRNA and for the study of lung diseases such as asthma, lung
CC cancer, chronic obstructive pulmonary disease (COPD), interstitial lung
CC disease (ILD), familial idiopathic pulmonary fibrosis, neurofibromatosis,
CC tuberous sclerosis, Gaucher's disease, Niemann-Pick disease, Hermansky-
CC Pudlak syndrome, sarcoidosis, pulmonary haemosiderosis, pulmonary
CC histiocytosis, lymphangioleiomyomtosis, pulmonary alveolar proteinosis,
CC Karagener syndrome, fibrocystic pulmonary dysplasia, primary ciliary
CC dyskinesis, pulmonary hypertension and hyaline membrane disease. The
CC present sequence is a single exon probe open reading frame of the
CC invention. Note: The sequence data for this patent did not form part of
CC the printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 267 BP; 3 A; 151 C; 4 G; 109 T; 0 U; 0 Other;

Query Match 0.9%; Score 24.2; DB 1; Length 267;
Best Local Similarity 45.5%; Pred. No. 10;
Matches 86; Conservative 0; Mismatches 103; Indels 0; Gaps 0;

```
Qy       2162 CCTGCTTTTGACCTGCCTTCTTCCCCTTCCTCTATTCCTTTGGTTTTTGCATAGTGTCTC 2221
             ||| ||  |   |  |||||| | ||| |  ||  ||||      | | |       ||
Db         78 CCTTCTCCTCCTCCTCCTTCTCCTCCTCCTCCTTCTCCTCCTCCTCCTTCTCCTCCTCCT 137

Qy       2222 TGGCTTCCTGGATGTTTTATGCCTGGATTATTTTAGACTTAACATTTTCTTTGACCAAGG 2281
             |  | ||||     || |   |||       | |     ||   | || || ||  ||
Db        138 TCTCCTCCTCCTCCTTCTCCTCCTCCTCCTTCTCCTCCTCCTCCTTCTCCTTCTCCTCCT 197

Qy       2282 TATCCATTTCTTCTATCTTGTCTTCACTGCCTGAGATTCTCTCTTCTATCTCTTGTATTC 2341
               |||   || ||   ||   || | |  ||     ||    || ||     ||| |  ||
Db        198 CCTCCTCCTCCTCCTCCTCCCCTCCTCCTCCACCTGTTTCTCCTCCTTCTCCTTTTCCTC 257

Qy       2342 TGTCAGTGA 2350
              |  | | ||
Db        258 TTCCTGGGA 266
```

RESULT 28
AAK93580
ID AAK93580 standard; cDNA; 868 BP.
XX
AC AAK93580;
XX
DT 06-NOV-2001 (first entry)
XX
DE Human cDNA clone representative sequence, SEQ ID NO: 2040.
XX
KW Human; full length cDNA; cDNA synthesis; oligo-capping; ss.
XX
OS Homo sapiens.
XX
PN EP1130094-A2.
XX
PD 05-SEP-2001.
XX
PF 07-JUL-2000; 2000EP-00114089.
XX
PR 08-JUL-1999; 99JP-00194486.
PR 11-JAN-2000; 2000JP-00118774.
PR 02-MAY-2000; 2000JP-00183765.
XX
PA (HELI-) HELIX RES INST.
XX
PI Ota T, Nishikawa T, Isogai T, Hayashi K, Ishii S, Kawai Y;
PI Wakamatsu A, Sugiyama T, Nagai K, Kojima S, Otsuki T, Koga H;
XX
DR WPI; 2001-524255/58.
XX
PT 830 Primers useful for synthesizing full length cDNA clones and their use
PT in genetic manipulation.
XX
PS Example 11; SEQ ID NO 2040; 1380pp + Sequence Listing; English.
XX
CC The invention relates to primers for synthesising full length cDNA
CC clones. 830 cDNA molecules encoding a human protein have been isolated
CC and nucleotide sequences of 5'- and 3'-ends of the cDNA molecules have
CC been determined. Primers for synthesising the full length cDNA are useful
CC for clarifying the function of the protein encoded by the cDNA. The full
CC length clones were obtained by construction of full length enriched cDNA
CC libraries that were synthesised by the oligo-capping method. The primers
CC enable the production of the full length cDNA easily without any special
CC methods. The present sequence was used as the representative sequence
CC from a human clone which was used in homology searches to identify the
CC clone. Note: The sequence data for this patent did not form part of the
CC printed specification, but was obtained in CD-ROM format directly from
CC EPO
XX
SQ Sequence 868 BP; 199 A; 220 C; 254 G; 190 T; 0 U; 5 Other;

Query Match 0.9%; Score 23.8; DB 1; Length 868;
Best Local Similarity 57.3%; Pred. No. 19;
Matches 43; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

```
Qy        923 ATTCAATTTTGGAGAGTTTCATAGGGTGCTGACAAGAAGGTACAGTCTTTGTGTTTTGGT 982
              |||  |  ||| | || ||||| | | |  |  | |||||   || ||  |  ||| ||
Db        107 ATTGGAAGTTGCAAAGATTCATTGAGGGGAGCAAGGAAGGAGGAGCCTCAGCCTTTAGGA 166

Qy        983 GAAATAGTCTGTAAA 997
              |    |  | | ||||
Db        167 GCTTTCCTTTTTAAA 181
```

RESULT 29
AAK91631
ID AAK91631 standard; cDNA; 868 BP.
XX
AC AAK91631;
XX
DT 06-NOV-2001 (first entry)
XX
DE Human cDNA 5'-end sequence, SEQ ID NO: 91.
XX
KW Human; full length cDNA; cDNA synthesis; oligo-capping; ss.
XX
OS Homo sapiens.
XX
PN EP1130094-A2.
XX
PD 05-SEP-2001.
XX
PF 07-JUL-2000; 2000EP-00114089.
XX
PR 08-JUL-1999; 99JP-00194486.
PR 11-JAN-2000; 2000JP-00118774.
PR 02-MAY-2000; 2000JP-00183765.
XX
PA (HELI-) HELIX RES INST.
XX
PI Ota T, Nishikawa T, Isogai T, Hayashi K, Ishii S, Kawai Y;
PI Wakamatsu A, Sugiyama T, Nagai K, Kojima S, Otsuki T, Koga H;
XX
DR WPI; 2001-524255/58.
XX
PT 830 Primers useful for synthesizing full length cDNA clones and their use
PT in genetic manipulation.
XX
PS Claim 2; SEQ ID NO 91; 1380pp + Sequence Listing; English.
XX
CC The invention relates to primers for synthesising full length cDNA
CC clones. 830 cDNA molecules encoding a human protein have been isolated
CC and nucleotide sequences of 5'- and 3'-ends of the cDNA molecules have
CC been determined. Primers for synthesising the full length cDNA are useful
CC for clarifying the function of the protein encoded by the cDNA. The full
CC length clones were obtained by construction of full length enriched cDNA
CC libraries that were synthesised by the oligo-capping method. The primers

CC enable the production of the full length cDNA easily without any special
CC methods. The present sequence is the nucleotide sequence of the 5'-end of
CC a cDNA provided in the invention. Note: The sequence data for this patent
CC did not form part of the printed specification, but was obtained in CD-
CC ROM format directly from EPO
XX
SQ Sequence 868 BP; 199 A; 220 C; 254 G; 190 T; 0 U; 5 Other;

Query Match 0.9%; Score 23.8; DB 1; Length 868;
Best Local Similarity 57.3%; Pred. No. 19;
Matches 43; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

Qy 923 ATTCAATTTTGGAGAGTTTCATAGGGTGCTGACAAGAAGGTACAGTCTTTGTGTTTTGGT 982
Db 107 ATTGGAAGTTGCAAAGATTCATTGAGGGGAGCAAGGAAGGAGGAGCCTCAGCCTTTAGGA 166

Qy 983 GAAATAGTCTGTAAA 997
Db 167 GCTTTCCTTTTTAAA 181

RESULT 30
ABQ47966
ID ABQ47966 standard; DNA; 612 BP.
XX
AC ABQ47966;
XX
DT 12-JUL-2002 (first entry)
XX
DE Oligonucleotide for detecting cytosine methylation SEQ ID NO 34557.
XX
KW Human; cytosine methylation; 5'-CpG-3'; uracil; cytosine; diagnosis;
KW drug; side effect; cancer; central nervous system; cardiovascular;
KW gastrointestinal; respiratory system; single nucleotide polymorphism;
KW SNP; cell differentiation; ds.
XX
OS Homo sapiens.
XX
PN WO200218632-A2.
XX
PD 07-MAR-2002.
XX
PF 01-SEP-2001; 2001WO-EP010074.
XX
PR 01-SEP-2000; 2000DE-01043826.
PR 05-SEP-2000; 2000DE-01044543.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K, Guetig D;
XX
DR WPI; 2002-371829/40.
XX
PT Determining the degree of cytosine methylation in genomic DNA, useful for
PT diagnosis and prognosis, comprises selective hybridization of amplicons
PT from chemically treated DNA.
XX
PS Claim 12; 56pp + Sequence Listing; 56pp; German.
XX
CC This invention describes a novel method for determining the degree of
CC methylation of a particular cytosine in a motif 5'-CpG-3', present in a
CC genomic sample of DNA. The sample is treated chemically to convert
CC cytosine (C) but not methylated C, to uracil, then part of the genomic
CC DNA that contains the target C is amplified to form a labeled amplicon.
CC The amplicon is hybridised to two classes, each with at least one member,
CC of oligonucleotides and/or peptide-nucleic acid (PNA) oligomers and the
CC degree of hybridisation to both classes is determined from the label on
CC the amplicon. From the ratio of labels hybridised to the two classes of
CC oligomers, the degree of methylation is calculated. The method is used:
CC (i) for diagnosis and/or prognosis of side effects of therapeutic drugs
CC and of a wide range of diseases, e.g. cancer, disorders of the central
CC nervous, cardiovascular, gastrointestinal and respiratory systems etc.,
CC particularly by detecting mutations or single nucleotide polymorphisms
CC (SNP's); and (ii) for differentiation of cell or tissue types and for
CC investigating cell differentiation. The method allows the methylation
CC status of many C residues to be determined simultaneously. ABQ13410-
CC ABQ54121 represent genomic DNA sequences used to illustrate the method
CC for determining the degree of cytosine methylation described in the
CC disclosure of the invention
XX
SQ Sequence 612 BP; 88 A; 72 C; 216 G; 236 T; 0 U; 0 Other;

Query Match 0.9%; Score 23.4; DB 1; Length 612;
Best Local Similarity 46.2%; Pred. No. 22;
Matches 78; Conservative 0; Mismatches 91; Indels 0; Gaps 0;

Qy 2041 GTGGGGAGTTTCTTTTCCGGTCCAATCTATTTGGTGTTTTGTATGCTTCTTGTACCTTGA 2100
Db 431 GGGGGTCGTTTTTCGTTCGGGGTGATTTCGTTTTTTTGGGCGATGTTTTTTATTTTTAGG 490

Qy 2101 TAGGCATCTCTTTCTCAAGGTTAGGAAATTTTTCTTTTTTGGTTTTCTTGAAAATATTTT 2160
Db 491 TACGCGTTTTTTTCGTGCGGTCGTATCGCGTATGTCGGTTTTTATATTAGAAAATACGAT 550

Qy 2161 CCCTGCTTTTGACCTGCCTTCTTCCCCTTCCTCTATTCCTTTGGTTTTT 2209
Db 551 TTGTAAAGTATATTTAGGGTGTTTTTTTTAATTTTTTAAGGGAGTTTTT 599

RESULT 31
ABQ47967/c
ID ABQ47967 standard; DNA; 612 BP.
XX
AC ABQ47967;
XX
DT 12-JUL-2002 (first entry)
XX
DE Oligonucleotide for detecting cytosine methylation SEQ ID NO 34558.
XX
KW Human; cytosine methylation; 5'-CpG-3'; uracil; cytosine; diagnosis;
KW drug; side effect; cancer; central nervous system; cardiovascular;
KW gastrointestinal; respiratory system; single nucleotide polymorphism;
KW SNP; cell differentiation; ds.
XX
OS Homo sapiens.
XX
PN WO200218632-A2.
XX
PD 07-MAR-2002.
XX
PF 01-SEP-2001; 2001WO-EP010074.
XX
PR 01-SEP-2000; 2000DE-01043826.
PR 05-SEP-2000; 2000DE-01044543.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K, Guetig D;
XX
DR WPI; 2002-371829/40.
XX
PT Determining the degree of cytosine methylation in genomic DNA, useful for
PT diagnosis and prognosis, comprises selective hybridization of amplicons
PT from chemically treated DNA.
XX
PS Claim 12; 56pp + Sequence Listing; 56pp; German.
XX
CC This invention describes a novel method for determining the degree of
CC methylation of a particular cytosine in a motif 5'-CpG-3', present in a
CC genomic sample of DNA. The sample is treated chemically to convert
CC cytosine (C) but not methylated C, to uracil, then part of the genomic
CC DNA that contains the target C is amplified to form a labeled amplicon.
CC The amplicon is hybridised to two classes, each with at least one member,
CC of oligonucleotides and/or peptide-nucleic acid (PNA) oligomers and the
CC degree of hybridisation to both classes is determined from the label on
CC the amplicon. From the ratio of labels hybridised to the two classes of

CC oligomers, the degree of methylation is calculated. The method is used:
CC (i) for diagnosis and/or prognosis of side effects of therapeutic drugs
CC and of a wide range of diseases, e.g. cancer, disorders of the central
CC nervous, cardiovascular, gastrointestinal and respiratory systems etc.,
CC particularly by detecting mutations or single nucleotide polymorphisms
CC (SNP's); and (ii) for differentiation of cell or tissue types and for
CC investigating cell differentiation. The method allows the methylation
CC status of many C residues to be determined simultaneously. ABQ13410-
CC ABQ54121 represent genomic DNA sequences used to illustrate the method
CC for determining the degree of cytosine methylation described in the
CC disclosure of the invention
XX
SQ Sequence 612 BP; 236 A; 216 C; 72 G; 88 T; 0 U; 0 Other;

Query Match 0.9%; Score 23.4; DB 1; Length 612;
Best Local Similarity 46.2%; Pred. No. 22;
Matches 78; Conservative 0; Mismatches 91; Indels 0; Gaps 0;

Qy 2041 GTGGGGAGTTTCTTTTCCGGTCCAATCTATTTGGTGTTTTGTATGCTTCTTGTACCTTGA 2100
Db 182 GGGGGTCGTTTTTTCGTTCGGGGTGATTTCGTTTTTTTTGGGCGATGTTTTTTATTTTTAGG 123

Qy 2101 TAGGCATCTCTTTCTCAAGGTTAGGAAATTTTTCTTTTTTGGTTTTCTTGAAAATATTTT 2160
Db 122 TACGCGTTTTTTTCGTGCGGTCGTATCGCGTATGTCGGTTTTTATATTAGAAAATACGAT 63

Qy 2161 CCCTGCTTTTGACCTGCCTTCTTCCCCTTCCTCTATTCCTTTGGTTTTT 2209
Db 62 TTGTAAAGTATATTTAGGGTGTTTTTTTTAATTTTTTAAGGGAGTTTTT 14

RESULT 32
ABX48480
ID ABX48480 standard; cDNA; 379 BP.
XX
AC ABX48480;
XX
DT 21-FEB-2003 (first entry)
XX
DE Bovine EST associated with lactation/muscle/fat deposition #13645.
XX
KW Bovine; ss; EST; expressed sequence tag; lactation; LMFD;
KW muscle deposition; fat deposition; genome mapping; gene identification;
KW gene analysis; cattle breeding.
XX
OS Bos Taurus.
XX
PN US2002137139-A1.
XX
PD 26-SEP-2002.
XX
PF 24-SEP-2001; 2001US-00960352.
XX
PR 12-JAN-1999; 99US-0115707P.
PR 11-JAN-2000; 2000US-00480902.
XX
PA (BYAT/) BYATT J C.
PA (MATH/) MATHIALAGAN N.
PA (TAON/) TAO N.
PA (WARR/) WARREN W C.
XX
PI Byatt JC, Mathialagan N, Tao N, Warren WC;
XX
DR WPI; 2003-110599/10.
XX
PT New nucleic acid associated with lactation, and muscle and fat
PT deposition, useful for genome mapping, gene identification and analysis,
PT cattle breeding, or for genetically improving cattle.
XX
PS Claim 2; SEQ ID NO 13645; 245pp; English.
XX
CC The invention relates to a purified nucleic acid molecule associated with
CC lactation or muscle and fat deposition (designated LMFD), derived from
CC cattle, and the LMFD nucleic acid can specifically hybridise to a second
CC nucleic acid molecule comprising any of 15112 nucleotide sequences,
CC appearing as ABX34836-ABX49947, or complements of them. Also included are
CC ; (1) a transformed cell having a nucleic acid comprising an LMFD nucleic
CC acid linked to a promoter and a 3' non- translated sequence that
CC functions in the cell to cause termination of transcription and addition
CC of polyadenylated ribonucleotides to a 3' end of the mRNA molecule; and
CC (2) determining a level or pattern of a molecule in a bovine cell or
CC tissue comprising: (a) incubating a marker nucleic acid (comprising any
CC of the 15112 nucleic acid sequences or its complement or fragment) with a
CC complementary nucleic acid molecule obtained from the bovine cell or
CC tissue, where hybridisation between the marker nucleic acid and the
CC complementary nucleic acid permits the detection of the molecule; and (b)
CC detecting the level or pattern of the complementary nucleic acid, where
CC the detection of the complementary nucleic acid is predictive of the
CC level or pattern of the molecule. The LMFD nucleic acid is used for
CC determining a level or pattern of a molecule in a bovine cell or tissue.
CC It is useful for genome mapping, gene identification and analysis, cattle
CC breeding, preparation of constructs for use in cattle gene expression, or
CC for genetically improving cattle. The present sequence is one of the
CC 15112 bovine LMFD EST (expressed sequence tag) nucleic acids. Note: The
CC present sequence was not shown in the specification but was obtained in
CC electronic format from the USPTO web site:
CC seqdata.uspto.gov/sequence.html?DocID=20020137139
XX
SQ Sequence 379 BP; 88 A; 112 C; 105 G; 74 T; 0 U; 0 Other;

Query Match 0.9%; Score 23.2; DB 1; Length 379;
Best Local Similarity 53.3%; Pred. No. 21;
Matches 49; Conservative 0; Mismatches 43; Indels 0; Gaps 0;

Qy 216 GAATCCAGTGTTTCAGGGGGTCCCTCTTTCTCCAATTGATGCAATTGGAGGCTATGGCTC 275
Db 196 GGATCCCAACTTTCAGGGGAGCAAAGAATTCCAAATTGAGGAGGCAGTGATCTCCCCAGG 255

Qy 276 CTTTGATCACTCCTCCAGGAGCAGGCAGGGAA 307
Db 256 CTTCAATGTCTTTTCCAAGAAGAGTCAGGGAA 287

RESULT 33
ABX73083
ID ABX73083 standard; cDNA; 260 BP.
XX
AC ABX73083;
XX
DT 14-MAR-2003 (first entry)
XX
DE Human GPCR cDNA #5 fragment #1, Incyte clone 2705201H1.
XX
KW Human; ss; G-protein coupled receptor; GPCR; neoplastic disorder;
KW neurological disorder; immune disorder; cytostatic; pancreatic cancer;
KW follicular carcinoma of the thyroid; leiomyoma of the uterus; epilepsy;
KW interstitial nephritis; cancer.
XX
OS Homo sapiens.
XX
PN US2002106655-A1.
XX
PD 08-AUG-2002.
XX
PF 28-JUN-2001; 2001US-00895686.
XX
PR 17-SEP-1998; 98US-00156513.
XX
PA (BAND/) BANDMAN O.
PA (LALP/) LAL P G.
PA (TANG/) TANG Y T.
PA (BAUG/) BAUGHN M R.
XX
PI Bandman O, Lal PG, Tang YT, Baughn MR;
XX
DR WPI; 2002-697866/75.

XX
PT New cDNAs encoding G protein coupled receptors are useful for the
PT diagnosis, prognosis, treatment and evaluation of therapies for
PT neoplastic, neurological and immune disorders.
XX
PS Claim 2; Page 43; 61pp; English.
XX
CC The invention relates to an isolated cDNA encoding G-protein coupled
CC receptor (GPCR) appearing as ABU54865-ABU54870. Also included are
CC fragments of the cDNAs, species variants having at least 75% identity to
CC the cDNAs, vectors comprising the cDNAs, a host cells comprising the
CC above vectors, producing a protein (comprising culturing the above host
CC cell under expression conditions and recovering the protein), using a
CC cDNA to detect expression of a nucleic acid in a sample or to screen for
CC compounds or molecules which bind to the cDNAs, using the GPCR proteins
CC to screen compounds or molecules for ligands, using a GPCR protein to
CC prepare and purify antibodies, an anti-GPCR antibody and using the
CC antibody to detect expression of a GPCR protein in a sample and is
CC diagnostic of cancer. The invention is useful for the diagnosis,
CC prognosis, treatment and evaluation of therapies for neoplastic,
CC neurological and immune disorders, particularly follicular carcinoma of
CC the thyroid, leiomyoma of the uterus, pancreatic cancer, epilepsy,
CC interstitial nephritis and immune response as a complication of cancer.
CC The present sequence is a human GPCR cDNA fragment
XX
SQ Sequence 260 BP; 28 A; 84 C; 88 G; 60 T; 0 U; 0 Other;

Query Match 0.8%; Score 23; DB 1; Length 260;
Best Local Similarity 48.1%; Pred. No. 22;
Matches 65; Conservative 0; Mismatches 70; Indels 0; Gaps 0;

```
Qy        291 CAGGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCAGGCCCAATG 350
              | || || |   || | | ||| | | | | ||  ||   |   |||||          ||
Db         91 CTGGTGCGGCATGGCACGGGCCCCGCGGGCTGGCAGCTGGTGGGCCTGGCGCTGTGCCTG 150

Qy        351 ATCATGTGGTCAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCA 410
              ||  ||  |  |||| |   |    ||  ||||   ||||      ||| |    ||
Db        151 ATGCTGGTGCAAGTCATCATCGCTGTGGAGTGGCTGGTGCTCACCGTGCTGCGTGACACA 210

Qy        411 GGTGCAGGCAGGGCC 425
                |  ||| | | |||
Db        211 AGGCCAGCCTGCGCC 225
```

RESULT 34
ABN21775/c
ID ABN21775 standard; cDNA; 292 BP.
XX
AC ABN21775;
XX
DT 24-JUN-2002 (first entry)
XX
DE Human ORFX polynucleotide sequence SEQ ID NO:12027.
XX
KW Human; open reading frame; ORFX; gene therapy; cancer; cirrhosis;
KW hyperproliferative disorder; psoriasis; benign tumour; haemorrhage;
KW degenerative disorder; osteoarthritis; neurodegenerative disorder;
KW cardiovascular disease; diabetes mellitus; systemic lupus erythematosus;
KW hypertension; hypothyroidism; cholesterol ester storage disease;
KW immune deficiency; immune disorder; infectious disease;
KW autoimmune disorder; rheumatoid arthritis; autoimmune thyroiditis;
KW myasthenia gravis; gene; ss.
XX
OS Homo sapiens.
XX
PN WO200192523-A2.
XX
PD 06-DEC-2001.
XX
PF 29-MAY-2001; 2001WO-US010836.
XX
PR 30-MAY-2000; 2000US-0206132P.
XX
PA (CURA-) CURAGEN CORP.
XX
PI Shimkets RA, Leach MD;
XX
DR WPI; 2002-106308/14.
DR P-PSDB; ABP06023.
XX
PT Novel human polypeptides and polynucleotides useful for diagnosing,
PT preventing and treating cardiovascular disease, neurodegenerative,
PT hyperproliferative disorders and autoimmune disorders.
XX
PS Disclosure; SEQ ID NO 12027; 1037pp; English.
XX
CC The present invention describes substantially purified human proteins
CC (referred to as open reading frame, ORFX, where X is 1-11491 (see Table 1
CC in the specification). ABN15762 to ABN27252 encode the human ORFX
CC proteins given in ABP00010 to ABP11500. ORFX proteins are useful for
CC treating or preventing a pathology associated with an ORFX-associated
CC disorder in humans, and in the manufacture of a medicament for treating a
CC syndrome associated with ORFX-associated disorder. ORFX polynucleotide
CC sequences can be used in gene therapy. ORFX sequences can be used in the
CC treatment of cancer, hyperproliferative disorders, cirrhosis of liver,
CC psoriasis, benign tumours, keloid, degenerative disorders, haemorrhage,
CC osteoarthritis, neurodegenerative disorders, disorders related to organ
CC transplantation, cardiovascular diseases, diabetes mellitus, systemic
CC lupus erythematosus, hypertension, hypothyroidism, cholesterol ester
CC storage disease, various immune deficiencies and disorders, infectious
CC diseases, autoimmune disorders such as multiple sclerosis, rheumatoid
CC arthritis, autoimmune thyroiditis, myasthenia gravis, graft-versus-host
CC disease and autoimmune inflammatory eye disease. ORFX proteins are also
CC useful for treating burns, incisions, ulcers, for treating osteoporosis,
CC bone degenerative disorders, or periodontal disease, and for gut
CC protection or regeneration and treatment of lung or liver fibrosis,
CC reperfusion injury in various tissues and conditions resulting from
CC systemic cytokine damage. N.B. The sequence data for this patent did not
CC form part of the printed specification, but was obtained in electronic
CC format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 292 BP; 66 A; 80 C; 97 G; 49 T; 0 U; 0 Other;

Query Match 0.8%; Score 23; DB 1; Length 292;
Best Local Similarity 54.0%; Pred. No. 22;
Matches 47; Conservative 0; Mismatches 40; Indels 0; Gaps 0;

```
Qy        294 GAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCAGGCCCAATGATC 353
              || ||||  |  |   || |||||  | |||| ||| |  | ||| ||  | |  | |
Db        141 GACCAGGAGGACATTGGCGTCAGGGTACTGCTTCTCGAACTCCTGCCACACTCCGTAGTA 82

Qy        354 ATGTGGTCAGTCCCCTGGGTACAGGCA 380
              | |  | ||  |  | ||| ||| |
Db         81 ACCTCTCCTGCTGCTGGCGTAGAGGAA 55
```

RESULT 35
AAT40850/c
ID AAT40850 standard; cDNA; 306 BP.
XX
AC AAT40850;
XX
DT 16-MAR-1997 (first entry)
XX
DE Serine protease nfSP8-299 gene.
XX
KW Flea; midgut; serine protease; nfSP8-299; recombinant vaccine;
KW domestic animal; infestation; insecticide; protease-inhibitor;
KW controlled release formulation; synergist; ss.
XX
OS Siphonaptera sp.
XX
FH Key Location/Qualifiers
FT unsure 1. .90
FT /*tag= a

```
FT                   /note= "back-translated from N-terminal part of PfSP8-99
FT                   (AAW01205)"
FT   unsure          91. .276
FT                   /*tag=  b
FT                   /note= "Corresponds to nfSP8-186 (AAT40826, claim 70)"
FT   unsure          277. .299
FT                   /*tag=  c
FT                   /note= "back-translated from C-terminal part of PfSP8-99
FT                   (AAW01205)"
XX
PN   WO9611706-A1.
XX
PD   25-APR-1996.
XX
PF   18-OCT-1995;   95WO-US014442.
XX
PR   18-OCT-1994;   94US-00326773.
PR   07-JUN-1995;   95US-00482130.
PR   07-JUN-1995;   95US-00484211.
PR   07-JUN-1995;   95US-00485443.
PR   07-JUN-1995;   95US-00485455.
XX
PA   (HESK-) HESKA CORP.
XX
PI   Grieve RB,  Rushlow KE,  Hunter SW,  Frank GR,  Stiegler GL,  Heath A;
PI   Yamanaka M,  Arfsten A,  Dale B;
XX
DR   WPI; 1996-221762/22.
DR   P-PSDB; AAW01205.
XX
PT   DNA encoding Flea serine protease and aminopeptidase - useful in vaccines
PT   to protect animals from flea infestation.
XX
PS   Claim 70; Page 182; 241pp; English.
XX
CC   This sequence (nfSP8-299) encodes a flea midgut serine protease (PfSP8-
CC   99), and has been isolated from a flea cDNA library by PCR using primers
CC   AAT40862-63 and hybridisation with probe AAT40866, based on conserved
CC   serine protease sequences. The sequence contains sequence AAT40826 (nfSP8
CC   -186), which spans 2 conserved serine protease sequences. The sequence
CC   shown has been derived from the encoded protein sequence (N- and C-
CC   terminal regions) and internal sequence AAT40826, since the appropriate
CC   page is missing from the specification. The sequence may be used to
CC   produce a recombinant vaccine for protection of domestic animals from
CC   flea infestation, or in isolation of protease-inhibitors which may be
CC   used in controlled release formulations to reduce the flea burden on and
CC   around the animal. The inhibitors may be included in insecticidal
CC   compositions to increase efficacy of other active compounds, by reducing
CC   proteolytic activity in the flea midgut
XX
SQ   Sequence 306 BP; 83 A; 30 C; 72 G; 56 T; 0 U; 65 Other;

  Query Match             0.8%;  Score 23;  DB 1;  Length 306;
  Best Local Similarity   58.5%;  Pred. No. 23;
  Matches   38;  Conservative    1;  Mismatches   26;  Indels    0;  Gaps    0;

Qy        684 CCAGGGTAGGGGCACTACCGCATTCCCTCTCTCTTCCAAACACTTCTATTTCTTGATTTC 743
              |: ||  || | |  | || |  |||   |||| | || |||  | | |||||  | |||
Db        280 CYTGGCAAGTGTCTTTTCCACCATCCAATTCTCCTGCACACATCTGTGTTTCTACAATTC 221

Qy        744 TATCT 748
                || |
Db        220 CATTT 216


RESULT 36
AAA54031/c
ID   AAA54031 standard; DNA; 1507 BP.
XX
AC   AAA54031;
XX
DT   08-FEB-2001  (first entry)
XX
DE   Human factor X coding sequence.
XX
KW   Vitamin K dependent protein; VKDP; gamma-carboxylation; chimeric protein;
KW   fusion protein; coagulation factor; Factor X; Factor VII; Protein S;
KW   Factor IX; Protein C; prothrombin; blood clotting; haemophilia; human;
KW   ds.
XX
OS   Homo sapiens.
XX
PN   WO200054787-A1.
XX
PD   21-SEP-2000.
XX
PF   16-MAR-2000; 2000WO-US006934.
XX
PR   16-MAR-1999;   99US-0124609P.
XX
PA   (CHIL-) CHILDRENS HOSPITAL PHILADELPHIA.
PA   (UYNC-) UNIV NORTH CAROLINA.
XX
PI   High KA,  Camire RM,  Larson PJ,  Stafford DW;
XX
DR   WPI; 2000-638152/61.
XX
PT   Chimeric DNA for optimizing gamma carboxylation of vitamin K-dependent
PT   protein useful for treating diseases associated with the protein,
PT   comprises sequence encoding propeptide fused to sequence encoding the
PT   protein.
XX
PS   Disclosure; Fig 6a; 60pp; English.
XX
CC   Efficient processing and release of mature two-chain factor X into the
CC   circulation requires: removal of the signal sequence; formation of
CC   disulfide bonds; modification of amino terminal glutamic acid residues,
CC   to gamma-carboxyglutamic acid; modification of one aspartic acid in the
CC   first epidermal growth factor (EGF) domain to Beta-hydroxyaspartic acid;
CC   addition of N- and O-linked oligosaccharides to the activation peptide;
CC   removal of an internal tripeptide to yield two-chain factor X and removal
CC   of the propeptide just prior to secretion. While some of these
CC   modifications do not appear essential for factor X function the removal
CC   of the signal sequence, propeptide, internal tripeptide and full gamma-
CC   carboxylation are all steps which are important requisites for the
CC   production of biologically active factor X/FXa. Isolated chimeric
CC   polynucleotides are described which encode a propeptide fused to a
CC   nucleic acid sequence encoding a vitamin K-dependent protein (VKDP). The
CC   fusion proteins encoded are vitamin K-dependent protein gamma-
CC   carboxylation enhancers and are useful for optimising the gamma-
CC   carboxylation of a VKDP to produce a fully gamma-carboxylated VKDP. The
CC   fusion proteins and recombinant cells expressing them are useful for
CC   alleviating a VKDP associated disease. The fusion constructs result in
CC   the production of fully gamma-carboxylated mature VKDPs, which are
CC   biologically active. The invention encompasses all combinations of
CC   propeptide sequences (modified or not) and VKDP's. This sequence encodes
CC   the signal, propeptide and mature protein sequence of human Factor X
XX
SQ   Sequence 1507 BP; 394 A; 429 C; 446 G; 238 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 23;  DB 1;  Length 1507;
  Best Local Similarity   60.3%;  Pred. No. 38;
  Matches   38;  Conservative    0;  Mismatches   25;  Indels    0;  Gaps    0;

Qy       2070 TTTGGTGTTTTGTATGCTTCTTGTACCTTGATAGGCATCTCTTTCTCAAGGTTAGGAAAT 2129
              |||  | |||| | |  || || |   ||||  || |||||  | | | ||  ||||  |
Db       1506 TTTTTTTTTTTTTTTTTTTTTTTTTTTTGAGTGGGATCTCACTTTAATGGAGAGGACGT 1447

Qy       2130 TTT 2132
                | |
Db       1446 TAT 1444


RESULT 37
ABZ35322/c
ID   ABZ35322 standard; cDNA; 1507 BP.
```

```
XX
AC   ABZ35322;
XX
DT   05-FEB-2003  (first entry)
XX
DE   Human gene expression profile polynucleotide SEQ ID NO 433.
XX
KW   Human; artery; endothelium; umbilical; vein; aorta; pulmonary artery;
KW   bronchial epithelium; prostate; muscle; lung fibroblast; osteoblast;
KW   tumour; microarray; genome mapping; antibiotic; antiviral; antifungal;
KW   gene expression; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200274979-A2.
XX
PD   26-SEP-2002.
XX
PF   20-MAR-2002; 2002WO-US008456.
XX
PR   20-MAR-2001; 2001US-0276947P.
XX
PA   (ORTH ) ORTHO CLINICAL DIAGNOSTICS INC.
XX
PI   Wan J,  Wang Y;
XX
DR   WPI; 2002-740862/80.
XX
PT   New gene expression profile generated from primary, endothelial,
PT   epithelial, and muscle cell types, useful for identifying disease
PT   pathologies involving alterations of gene expression, e.g. cancer.
XX
PS   Example 3; Page 580-581; 850pp; English.
XX
CC   The invention relates to a gene expression profile comprising one or more
CC   genes (ABZ34889-ABZ35692) and generated from a cell type. The cell type
CC   is a coronary artery endothelium, umbilical artery or vein endothelium,
CC   aortic endothelium, dermal microvascular endothelium, pulmonary artery
CC   endothelium, myometrium microvascular endothelium, keratinocyte
CC   epithelium, bronchial epithelium, mammary epithelium, prostate
CC   epithelium, renal cortical epithelium, renal proximal tubule epithelium,
CC   small airway epithelium, renal epithelium, umbilical artery smooth
CC   muscle, neonatal dermal fibroblast, pulmonary artery smooth muscle,
CC   dermal fibroblast, neural progenitor cells, skeletal muscle, astrocytes,
CC   aortic smooth muscle, mesangial cells, coronary artery smooth muscle,
CC   bronchial smooth muscle, uterine smooth muscle, lung fibroblast,
CC   osteoblasts or prostate stromal cell. The gene expression profile is used
CC   for determining the level of RNA expression for a sample, determining the
CC   phenotype of a cell and distinguishing cell types. The gene or a protein
CC   expression profile is useful in identifying disease pathologies involving
CC   alterations of gene expression. The assessment of expression profiles may
CC   provide meaningful information with respect to tumour type and stage,
CC   treatment methods, and prognosis. The gene or protein expression profile
CC   may also be used for creating microarrays. The microarray is useful for
CC   genetic and physical mapping of genomes, DNA sequencing, genetic or
CC   medical diagnosis, genotyping of organisms, confirming cell or tissue
CC   identifications and in identifying promising antibiotics, antiviral or
CC   antifungal agents
XX
SQ   Sequence 1507 BP; 394 A; 429 C; 446 G; 238 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 23;  DB 1;  Length 1507;
  Best Local Similarity   60.3%;  Pred. No. 38;
  Matches   38;  Conservative    0;  Mismatches   25;  Indels    0;  Gaps    0;

Qy       2070 TTTGGTGTTTTGTATGCTTCTTGTACCTTGATAGGCATCTCTTTCTCAAGGTTAGGAAAT 2129
             |||  | |||| | |  || || |   ||||  || |||||  | | | ||  ||||  |
Db       1506 TTTTTTTTTTTTTTTTTTTTTTTTTTTTGAGTGGGATCTCACTTTAATGGAGAGGACGT 1447

Qy       2130 TTT 2132
              | |
Db       1446 TAT 1444


RESULT 38
ADE84862/c
ID   ADE84862 standard; DNA; 1507 BP.
XX
AC   ADE84862;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Farnesyl transferase inhibitor modulated leukemia associated gene #81.
XX
KW   ss; cytostatic; farnesyl transferase inhibitor; gene expression;
KW   quinolinone; leukemia; cancer.
XX
OS   Homo sapiens.
XX
PN   WO2003038129-A2.
XX
PD   08-MAY-2003.
XX
PF   30-OCT-2002; 2002WO-US034784.
XX
PR   30-OCT-2001; 2001US-0338997P.
PR   30-OCT-2001; 2001US-0340081P.
PR   30-OCT-2001; 2001US-0340938P.
PR   30-OCT-2001; 2001US-0341012P.
XX
PA   (ORTH ) ORTHO CLINICAL DIAGNOSTICS INC.
XX
PI   Raponi M;
XX
DR   WPI; 2003-513497/48.
XX
PT   Determining whether a patient will respond to treatment with a farnesyl
PT   transferase inhibitor, by analyzing the expression of gene that is
PT   differentially modulated in the presence of the inhibitor.
XX
PS   Disclosure; SEQ ID NO 81; 346pp; English.
XX
CC   The invention relates to a method of determining whether a patient will
CC   respond to treatment with a farnesyl transferase inhibitor (FTI), by
CC   analyzing the expression of gene that is differentially modulated in the
CC   presence of an FTI. The method is useful for determining whether a
CC   patient will respond to treatment with a FTI such as (B)-6-[amino(4-
CC   chlorophenyl)(1-methyl-1H-imidazol-5-yl)methyl]-4-(3-chlorophenyl)-1-
CC   methyl-2-(1H)quinolinone, monitoring the therapy of a patient, treating a
CC   patient with leukemia with FTI if the analysis indicates that the patient
CC   will respond. This sequence corresponds to a gene whose expression may be
CC   modulated in the presence of FTI.
XX
SQ   Sequence 1507 BP; 394 A; 429 C; 446 G; 238 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 23;  DB 1;  Length 1507;
  Best Local Similarity   60.3%;  Pred. No. 38;
  Matches   38;  Conservative    0;  Mismatches   25;  Indels    0;  Gaps    0;

Qy       2070 TTTGGTGTTTTGTATGCTTCTTGTACCTTGATAGGCATCTCTTTCTCAAGGTTAGGAAAT 2129
             |||  | |||| | |  || || |   ||||  || |||||  | | | ||  ||||  |
Db       1506 TTTTTTTTTTTTTTTTTTTTTTTTTTTTGAGTGGGATCTCACTTTAATGGAGAGGACGT 1447

Qy       2130 TTT 2132
              | |
Db       1446 TAT 1444


RESULT 39
AAD37041/c
ID   AAD37041 standard; DNA; 200 BP.
XX
AC   AAD37041;
XX
DT   21-AUG-2002  (first entry)
XX
```

DE Targetting arm #2 used to disrupt epithin gene.
XX
KW Transgenic; transgenic animal; pharmacological therapy; gene therapy;
KW phenotype modulation; genetic disease; epithin; enzyme; ds.
XX
OS Unidentified.
XX
PN WO200203787-A2.
XX
PD 17-JAN-2002.
XX
PF 06-JUL-2001; 2001WO-US021427.
XX
PR 06-JUL-2000; 2000US-0216109P.
PR 06-JUL-2000; 2000US-0216251P.
PR 06-JUL-2000; 2000US-0216258P.
PR 06-JUL-2000; 2000US-0216768P.
PR 10-JUL-2000; 2000US-0217449P.
PR 10-JUL-2000; 2000US-0217450P.
PR 10-JUL-2000; 2000US-0217660P.
PR 27-JUL-2000; 2000US-0221491P.
PR 27-JUL-2000; 2000US-0221669P.
PR 27-JUL-2000; 2000US-0221670P.
PR 07-AUG-2000; 2000US-0223170P.
PR 07-AUG-2000; 2000US-0223172P.
PR 07-AUG-2000; 2000US-0223460P.
PR 26-OCT-2000; 2000US-0244037P.
PR 26-OCT-2000; 2000US-0244111P.
PR 26-JUN-2001; 2001US-0301217P.
XX
PA (DELT-) DELTAGEN INC.
XX
PI Allen KD, Leviten MW;
XX
DR WPI; 2002-154853/20.
XX
PT Novel non-human transgenic animal, preferably transgenic mice comprising
PT disruption in target gene, e.g., tryptase gene, useful for identifying an
PT agent that modulates expression or function of target gene.
XX
PS Example 2; Fig 7B; 74pp; English.
XX
CC The present invention relates to non-human transgenic animals preferably
CC transgenic mice comprising disruption in target gene such as tryptase
CC gene. The invention also relates to compositions and methods relating to
CC the characterisation of gene functions. The transgenic animals are useful
CC for identifying an agent that modulates the expression or function of a
CC target. They are useful for identifying an agent that modulates a
CC phenotype associated with a disruption in tryptase genes or limulus
CC clotting factor protease-like genes by administering an agent to the
CC transgenic animal and determining whether the agent modulates the
CC phenotype where the agent has effect on decreased body weight, decreased
CC thymus weight, decreased thymus to body weight ratio, increased pre-pulse
CC inhibition, significant decrease in their response latency to the hot
CC plate test or a decreased response threshold to metrazol. Agents that
CC modulate the expression, function or activity of the target gene are
CC useful for treating a disorder associated with a mutation in tryptase
CC gene or in limulus clotting factor protease-like gene. The transgenic
CC animals are useful for testing the efficacy of proposed genetic and
CC pharmacological therapies for human genetic diseases. They are useful as
CC models for diseases, disorders or conditions associated with phenotypes
CC relating to a disruption in a target and to identify drugs,
CC pharmaceuticals, therapies and interventions which may be effective in
CC treating a disease or other phenotypic characteristics of the animal. The
CC present sequence is a targetting arm which is used to disrupt mouse
CC epithin gene. This sequence is used in the exemplification of the
CC invention
XX
SQ Sequence 200 BP; 54 A; 49 C; 68 G; 29 T; 0 U; 0 Other;

Query Match 0.8%; Score 22.8; DB 1; Length 200;
Best Local Similarity 46.8%; Pred. No. 22;
Matches 72; Conservative 0; Mismatches 82; Indels 0; Gaps 0;

```
Qy        439 TCACTCCTCTAGTGAAAGGTGGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              || |||  ||       ||||| |  | |  ||| |  ||   ||  ||||||| |  |
Db        198 TCCCTCTCCTGTATCCAGGTGTGCATGTCGGGCATCCCTGTGGGTGTTTGTGGTCGGCTG 139

Qy        499 TCTCATACAGAGGATAGCACTAGATGCTGTCTGGGACATAGGTAAGCTTTCCAGAGAGAC 558
              |||       | | ||   |    ||   ||| ||   ||    |   | ||| ||| |
Db        138 TCTGTCCATGCTGCTATACCCCAGTGTGCTCTTTGATCCAGTCCCGAACTACAGGGAGCC 79

Qy        559 TTCATAATATATTTTCTTGAAGCCTCTGCTGGCA 592
              ||    | |    |    |    ||||||   |||
Db         78 TTGTGTACACGCCTGGCTTGTTCCTCTGAGCGCA 45
```

RESULT 40
ACH20452
ID ACH20452 standard; cDNA; 433 BP.
XX
AC ACH20452;
XX
DT 13-OCT-2003 (first entry)
XX
DE Human adult liver cDNA #64.
XX
KW Human; ss; sequencing by hybridisation; SBH; expressed sequence tag; EST;
KW genome mapping; biodiversity; genetic disorder.
XX
OS Homo sapiens.
XX
PN US2003073623-A1.
XX
PD 17-APR-2003.
XX
PF 30-JUL-2001; 2001US-00918995.
XX
PR 30-JUL-2001; 2001US-00918995.
XX
PA (DRMA/) DRMANAC R T.
PA (LABA/) LABAT I.
PA (STAC/) STACHE-CRAIN B.
PA (DICK/) DICKSON M C.
PA (JONE/) JONES L W.
XX
PI Drmanac RT, Labat I, Stache-Crain B, Dickson MC, Jones LW;
XX
DR WPI; 2003-615964/58.
XX
PT New polynucleotide sequences obtained from various cDNA libraries, useful
PT as hybridization probes, as oligomers for PCR, for chromosome and gene
PT mapping, in the recombinant production of protein, or in generating
PT antisense DNA or RNA.
XX
PS Claim 1; SEQ ID NO 7664; 44pp; English.
XX
CC The invention relates to an isolated polynucleotide comprising any one of
CC 38043 cDNA sequences, appearing as ACH12789-ACH50831, whose sequence was
CC determined by the technique of SBH (sequencing by hybridisation). Also
CC included is a purified polypeptide comprising a sequence corresponding to
CC a reading frame of the novel polynucleotide. The nucleic acid sequences
CC are useful in diagnostics as expressed sequence tags (EST) for
CC identifying expressed genes or for physical mapping of the human genome,
CC in forensics, in assessing biodiversities, or in identifying mutations
CC responsible for genetic disorders and other traits. The nucleotide
CC sequences are also useful as hybridisation probes, as oligomers for PCR,
CC for chromosome and gene mapping, in the recombinant production of
CC protein, or in generating antisense DNA or RNA. The purified polypeptide
CC is useful for generating antibodies specific for it. The present sequence
CC is one of the 38043 isolated cDNA/EST sequences. Note: The sequence data
CC for this patent did not form part of the printed specification, but was
CC obtained in electronic format directly from USPTO at
CC seqdata.uspto.gov/sequence.html?DocID=20030073623
XX
SQ Sequence 433 BP; 89 A; 107 C; 137 G; 100 T; 0 U; 0 Other;

```
  Query Match             0.8%;  Score 22.8;  DB 1;  Length 433;
  Best Local Similarity   54.9%;  Pred. No. 29;
  Matches   45;  Conservative    0;  Mismatches   37;  Indels    0;  Gaps    0;

Qy       1535 ATCTTGCACTTGTGAAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1594
             |||  ||||    || ||||| | | | ||| |         || | |  |||  |    |
Db        198 ATCAAGCACCGAGGACGTGTGCGGGAGAGTGAGATGTGCACTGAGGGACTGTTGGCCCCT 257

Qy       1595 GTGTGTGTGTGTGTGTGTGTCT 1616
             ||| | |  |||| | ||| ||
Db        258 GTGGGGGCCTGTGAGGGTGACT 279


RESULT 41
AAD08286/c
ID   AAD08286 standard; cDNA; 1151 BP.
XX
AC   AAD08286;
XX
DT   08-AUG-2001  (first entry)
XX
DE   Human secreted protein-encoding gene 4 cDNA clone HWHIH10, SEQ ID NO: 14.
XX
KW   Human; secreted protein; proliferative disorder; cancer; tumour; asthma;
KW   foetal abnormality; developmental abnormality; haematopoietic disorder;
KW   immune system disorder; AIDS; autoimmune disease; rheumatoid arthritis;
KW   Parkinson's disease; cognitive disorder; schizophrenia; skin disorder;
KW   psoriasis; sepsis; diabetes; atherosclerosis; cardiovascular disorder;
KW   inflammation; neurological disorder; Alzheimer's disease; food additive;
KW   angiogenic disorder; kidney disorder; gastrointestinal disorder; allergy;
KW   pregnancy-related disorder; endocrine disorder; infection; wound healing;
KW   cell culture; chemotaxis; vulnerary; binding partner identification;
KW   gene therapy; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             42. .914
FT                   /*tag=  a
FT                   /product= "Human secreted protein precursor"
FT   sig_peptide     42. .107
FT                   /*tag=  b
FT   mat_peptide     108. .911
FT                   /*tag=  c
FT                   /product= "Mature human secreted protein"
XX
PN   WO200136440-A1.
XX
PD   25-MAY-2001.
XX
PF   15-NOV-2000; 2000WO-US031282.
XX
PR   19-NOV-1999;   99US-0166414P.
PR   21-JUL-2000; 2000US-0219665P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Ruben SM,  Komatsoulis GA,  Birse CE,  Moore PA;
XX
DR   WPI; 2001-343795/36.
DR   P-PSDB; AAE03821.
XX
PT   Isolated nucleic acid molecule encoding a human secreted protein is used
PT   in preventing, treating or ameliorating a medical condition.
XX
PS   Claim 1; Page 440-441; 553pp; English.
XX
CC   AAD08283-AAD08355 represent cDNAs corresponding to 23 human secreted
CC   protein genes, and AAE03818-AAE03870 represent the proteins they encode.
CC   AAE03871-AAE03896 represent human secreted protein fragments or variants.
CC   The secreted proteins and their genes are useful for preventing, treating
CC   or ameliorating medical conditions, e.g., by protein or gene therapy.
CC   Pathological conditions can be diagnosed by determining the amount of the
CC   new protein in a sample or by determining the presence of mutations in
CC   the new genes. Specific uses are described for each of the 23 genes,
CC   based on the tissues in which they are most highly expressed, and include
CC   developing products for the diagnosis or treatment of proliferative
CC   disorders, cancer, tumours, foetal and developmental abnormalities,
CC   haematopoietic disorders, diseases of the immune system, AIDS, autoimmune
CC   diseases (e.g., rheumatoid arthritis), inflammation, allergies,
CC   neurological disorders (e.g., Alzheimer's disease, Parkinson's disease),
CC   cognitive disorders, schizophrenia, asthma, skin disorders (e.g.,
CC   psoriasis), sepsis, diabetes, atherosclerosis, cardiovascular disorders,
CC   angiogenic disorders, kidney disorders, gastrointestinal disorders;
CC   pregnancy-related disorders, endocrine disorders, and infections. The
CC   proteins can also be used to aid wound healing and epithelial cell
CC   proliferation, to prevent skin aging due to sunburn, to maintain organs
CC   before transplantation, for supporting cell culture of primary tissues,
CC   to regenerate tissues, to identify their cognate ligands or binding
CC   partners, and in chemotaxis, and can be used as a food additive or
CC   preservative to modify storage properties. Antibodies specific for a
CC   protein of the invention can be used in alleviating symptoms associated
CC   with the disorders mentioned above, and in diagnostic immunoassays e.g.,
CC   radioimmunoassay or enzyme linked immunosorbent assay (ELISA). The
CC   present sequence represents a human secreted protein-encoding cDNA of the
CC   invention
XX
SQ   Sequence 1151 BP; 252 A; 370 C; 336 G; 193 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 22.8;  DB 1;  Length 1151;
  Best Local Similarity   53.3%;  Pred. No. 40;
  Matches   48;  Conservative    0;  Mismatches   42;  Indels    0;  Gaps    0;

Qy        801 TTTTCTGTTGTTTCTGTTGTTGTTGTTGTTATCTAGATTTAAGCTGTGGTGGTCAGATAG 860
              |||| | || ||| | || || || || || | |   || |     |||   |    | |
Db       1146 TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTCACAGGCTGGGTTTTTATTGG 1087

Qy        861 GACATAGAGTATTATTTCAATTGTCTTTTA 890
              || | | |  | ||    ||  || |||
Db       1086 GAGAAACATAAATAAAATAAGGGTATTTGA 1057


RESULT 42
AAC55669
ID   AAC55669 standard; cDNA; 231 BP.
XX
AC   AAC55669;
XX
DT   17-JAN-2001  (first entry)
XX
DE   Human differentially regulated gene from Fig 35.
XX
KW   Human; differentially regulated gene; macrophage development; diagnosis;
KW   matrix metalloproteinase 19; MMP19; antiarthritic; antiinflammatory;
KW   destructive macrophage development inhibitor; arthritis;
KW   colorectal cancer; immune response; ss.
XX
OS   Homo sapiens.
XX
PN   WO200055373-A2.
XX
PD   21-SEP-2000.
XX
PF   15-MAR-2000; 2000WO-US006883.
XX
PR   15-MAR-1999;   99US-0124530P.
XX
PA   (EOSB-) EOS BIOTECHNOLOGY INC.
XX
PI   Murray R;
XX
DR   WPI; 2000-628200/60.
XX
PT   Screening drug candidates comprises adding a drug to a cell expressing an
PT   expression profile gene and determining the effect of the drug on the
```

```
PT   expression of the expression profile gene.
XX
PS   Example 2; Fig 35; 99pp; English.
XX
CC   The present invention describes a method for screening drug candidates.
CC   The method comprises adding a drug to a cell that expresses an expression
CC   profile gene encoding a protein encoded by 5 sequences of defined base
CC   pairs as given in C55638, C55642, C55643, C55644 and C55653 or a sequence
CC   represented by Genbank accession number X92521, X62466, J04130, X62087
CC   and X76534 (or a fragment) and determining the effect of the drug on the
CC   expression of the expression profile gene. An inhibitor of matrix
CC   metalloproteinase 19 (MMP-19), preferably an antibody, is useful for
CC   treating destructive macrophage disorders (DMD) by inhibiting DM
CC   development in a cell of an individual having arthritis. Antibodies to
CC   MMP-19 are useful for localising a therapeutic moiety preferably
CC   cytotoxic agent or a radioisotope to colorectal cancer tissue. A
CC   composition comprising MMP-19 is useful for eliciting an immune response
CC   in an individual. C55635 to C55710 represent human differentially
CC   regulated genes of the invention
XX
SQ   Sequence 231 BP; 66 A; 65 C; 61 G; 39 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 22.6;  DB 1;  Length 231;
  Best Local Similarity   60.7%;  Pred. No. 27;
  Matches   37;  Conservative    0;  Mismatches   24;  Indels    0;  Gaps    0;

Qy        287 CCTCCAGGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCAGGCCC 346
              |||  ||||| |||    | ||||||||  |     |   ||| |||  |||||||   |
Db         69 CCTGGAGGAGGAGGAGAAGCAGAGCCTCCTGGTGAAGGAGCTCCAGAGCCTGGCAGTGGC 128

Qy        347 A 347
              |
Db        129 A 129


RESULT 43
ACD81661
ID   ACD81661 standard; cDNA; 231 BP.
XX
AC   ACD81661;
XX
DT   18-SEP-2003  (first entry)
XX
DE   Human destructive macrophage sequence, DM35.
XX
KW   Destructive macrophage disease; differential expression; ss; human;
KW   antiarthritic; antiinflammatory; antiatherosclerotic; DMD; MMP-19;
KW   arthritis; inflammatory bowel disease; vascular disease;
KW   chronic obstructive pulmonary disorder; atherosclerosis; aneurysm.
XX
OS   Homo sapiens.
XX
PN   US2003049722-A1.
XX
PD   13-MAR-2003.
XX
PF   15-MAR-2000; 2000US-00525978.
XX
PR   15-MAR-1999;   99US-00124530.
XX
PA   (MURR/) MURRAY R.
PA   (CARA/) CARAS I W.
PA   (HEVE/) HEVEZI P.
PA   (WILS/) WILSON K.
XX
PI   Murray R,  Caras IW,  Hevezi P,  Wilson K;
XX
DR   WPI; 2003-512353/48.
XX
PT   Diagnosing destructive macrophage disorder (DMD) such as arthritis,
PT   aneurysms or atherosclerosis, or determining prognosis of individual with
PT   DMD, by determining expression or level of matrix metalloproteinase-19.
XX
PS   Example 2; Fig 35; 61pp; English.
XX
CC   The invention relates to diagnosing (M1) a destructive macrophage
CC   disorder (DMD) or determining (M2) the prognosis of an individual with
CC   DMD, by determining the expression or level of matrix metalloproteinase
CC   (MMP)-19. (M1) involves comparing the expression of the gene encoding MMP
CC   -19 in a first tissue type of a first individual, with expression of the
CC   gene from second normal tissue from the individual. (M2) involves
CC   determining level of MMP-19 in sample, where high level of MMP-19
CC   indicates poor prognosis. Also included are screening (M3) drug
CC   candidates (involves providing a cell that expresses an expression
CC   profile gene which encodes a protein encoded by any one of 5 expression
CC   profile genes which are nucleic acids differentially expressed in the
CC   development path of destructive macrophages (DMs), referred as DM
CC   sequences, and the sequence represented by accession number X92521,
CC   X62466, J04130, X62078 and X76534, or its fragment; adding a drug
CC   candidate to the cell, and determining the effect of the drug candidate
CC   on the expression of the expression profile gene), screening (M4) for a
CC   bioactive agent capable of binding to a destructive macrophage (DM)
CC   modulator protein or a bioactive agent capable of modulating the activity
CC   of a DM modulator protein (where the DM modulator protein is MMP-19 or
CC   its fragment), a biochip (comprising a nucleic acid segment encoding MMP-
CC   19, or its fragment, comprising fewer than 1000 nucleic acid probes), an
CC   anti MMP-19 antibody (II) which specifically binds to MMP- 19, or its
CC   fragment, screening for a bioactive agent capable of interfering with the
CC   binding of a DM modulator protein or its fragment and an antibody which
CC   binds to the DM modulator protein or its fragment and inhibiting DMD in a
CC   cell by administering antisense molecules to MMP- 19. The antibody is
CC   useful for treating an individual for DMD by inhibiting MMP-19. The DM
CC   modulator protein is useful for eliciting an immune response in an
CC   individual. The methods and compositions are useful for treating a DMD
CC   such as arthritis, inflammatory bowel disease, chronic obstructive
CC   pulmonary disorder and vascular disease, including atherosclerosis and
CC   aneurysms. The present sequence is a cDNA fragment from a gene
CC   differentially expressed in the development path of destructive
CC   macrophages
XX
SQ   Sequence 231 BP; 66 A; 65 C; 61 G; 39 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 22.6;  DB 1;  Length 231;
  Best Local Similarity   60.7%;  Pred. No. 27;
  Matches   37;  Conservative    0;  Mismatches   24;  Indels    0;  Gaps    0;

Qy        287 CCTCCAGGAGCAGGCAGGGAAGAGCCTCAGGTGATTGCTCCTCTAGATGCTGGCAGGCCC 346
              |||  ||||| |||    | ||||||||  |     |   ||| |||  |||||||   |
Db         69 CCTGGAGGAGGAGGAGAAGCAGAGCCTCCTGGTGAAGGAGCTCCAGAGCCTGGCAGTGGC 128

Qy        347 A 347
              |
Db        129 A 129


RESULT 44
AAC71307
ID   AAC71307 standard; DNA; 259 BP.
XX
AC   AAC71307;
XX
DT   09-FEB-2001  (first entry)
XX
DE   Single nucleotide polymorphism containing sequence #379.
XX
KW   Single nucleotide polymorphism; SNP; human; genetic disease;
KW   disease susceptibility; cardiovascular system; endocrine system;
KW   neurological system; forensic testing; paternity testing; ds.
XX
OS   Homo sapiens.
XX
PN   WO200058519-A2.
XX
PD   05-OCT-2000.
XX
PF   30-MAR-2000; 2000WO-US008440.
```

XX
PR 31-MAR-1999; 99US-0127248P.
XX
PA (WHED) WHITEHEAD INST BIOMEDICAL RES.
PA (AFFY-) AFFYMETRIX INC.
XX
PI Altshuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;
PI Lipshutz RJ, Patil N, Sklar P;
XX
DR WPI; 2000-611722/58.
XX
PT Nucleic acid selected from one of 106 genes comprising single nucleotide
PT polymorphisms, allele-specific oligonucleotides to the genes are useful
PT for phenotypic correlations, forensics, paternity testing, medicine and
PT genetic analysis.
XX
PS Claim 1; Fig 5; 214pp; English.
XX
CC The present invention is concerned with a number of human single
CC nucleotide polymorphisms (SNPs) which the inventors identified in human
CC genes. These SNPs can be used in disease diagnosis and prediction of an
CC individual's susceptibility to disease, in forensic and paternity testing
CC and in genetic mapping. In particular, the SNPs of the invention can be
CC used to diagnose susceptibility to diseases of the cardiovascular,
CC endocrine and neurological systems, such as coronary artery disease,
CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
CC diseases. Note: The degenerate codon within the sequence represents the
CC position of an SNP, for example the letter S represents a polymorphism
CC where the nucleotide may be C or G
XX
SQ Sequence 259 BP; 67 A; 61 C; 59 G; 71 T; 0 U; 1 Other;

Query Match 0.8%; Score 22.6; DB 1; Length 259;
Best Local Similarity 64.2%; Pred. No. 28;
Matches 34; Conservative 0; Mismatches 19; Indels 0; Gaps 0;

```
Qy        143 CATAATGCTCTTTATGTTGTCCAGTGTATTTTTACACTGTTGTTTACCCATCT 195
              || ||  ||||  || ||    | | |  |||||||| ||||  || |||| |
Db         37 CACAAATCTCTGCATCTTTCTGACTTTTGTTTTACACAGTTGAATATCCATGT 89
```

RESULT 45
AAC71343/c
ID AAC71343 standard; DNA; 271 BP.
XX
AC AAC71343;
XX
DT 09-FEB-2001 (first entry)
XX
DE Single nucleotide polymorphism containing sequence #391.
XX
KW Single nucleotide polymorphism; SNP; human; genetic disease;
KW disease susceptibility; cardiovascular system; endocrine system;
KW neurological system; forensic testing; paternity testing; ds.
XX
OS Homo sapiens.
XX
PN WO200058519-A2.
XX
PD 05-OCT-2000.
XX
PF 30-MAR-2000; 2000WO-US008440.
XX
PR 31-MAR-1999; 99US-0127248P.
XX
PA (WHED) WHITEHEAD INST BIOMEDICAL RES.
PA (AFFY-) AFFYMETRIX INC.
XX
PI Altshuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;
PI Lipshutz RJ, Patil N, Sklar P;
XX
DR WPI; 2000-611722/58.
XX
PT Nucleic acid selected from one of 106 genes comprising single nucleotide
PT polymorphisms, allele-specific oligonucleotides to the genes are useful
PT for phenotypic correlations, forensics, paternity testing, medicine and
PT genetic analysis.
XX
PS Claim 1; Fig 5; 214pp; English.
XX
CC The present invention is concerned with a number of human single
CC nucleotide polymorphisms (SNPs) which the inventors identified in human
CC genes. These SNPs can be used in disease diagnosis and prediction of an
CC individual's susceptibility to disease, in forensic and paternity testing
CC and in genetic mapping. In particular, the SNPs of the invention can be
CC used to diagnose susceptibility to diseases of the cardiovascular,
CC endocrine and neurological systems, such as coronary artery disease,
CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
CC diseases. Note: The degenerate codon within the sequence represents the
CC position of an SNP, for example the letter S represents a polymorphism
CC where the nucleotide may be C or G
XX
SQ Sequence 271 BP; 82 A; 43 C; 62 G; 83 T; 0 U; 1 Other;

Query Match 0.8%; Score 22.4; DB 1; Length 271;
Best Local Similarity 50.0%; Pred. No. 32;
Matches 56; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

```
Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
              | |||  || | || ||   |    ||  ||  | |  |||  || |  |  |  |||
Db        114 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 55

Qy       2664 CTTTGGCATATAGACGGCTGAGTTTGGGATGATTGTAATTCTAGGTGCTGAT 2715
              ||||||  || || ||| ||  ||     |       | ||| | || ||
Db         54 AATTGGCACGTAAACTGCTTAGAATGCCCGGTCCTCCCCTGTAGATACTCAT 3
```

RESULT 46
AAI11531/c
ID AAI11531 standard; DNA; 476 BP.
XX
AC AAI11531;
XX
DT 12-OCT-2001 (first entry)
XX
DE Probe #1464 for gene expression analysis in human cervical cell sample.
XX
KW Probe; human; microarray; gene expression; cervical epithelial cell;
KW cervical cancer; ss.
XX
OS Homo sapiens.
XX
PN WO200157278-A2.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US000670.
XX
PR 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-488901/53.
XX
PT Human genome-derived single exon nucleic acid probes useful for analyzing
PT gene expression in human cervical epithelial cells.
XX
PS Claim 25; SEQ ID NO 1464; 487pp; English.

```
XX
CC   The present invention relates to human single exon nucleic acid probes
CC   (SENP). The present sequence is one such probe. The SENPs are derived
CC   from human HeLa cells. The SENPs can be used to produce a single exon
CC   microarray, which can be used for measuring human gene expression in a
CC   sample derived from human cervical epithelial cells. By measuring gene
CC   expression, the probes are therefore useful in grading and/or staging of
CC   diseases of the cervix, notably cervical cancer. Note: The sequence data
CC   for this patent did not form part of the printed specification, but was
CC   obtained in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 476 BP; 125 A; 104 C; 99 G; 148 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 22.4;  DB 1;  Length 476;
  Best Local Similarity   50.0%;  Pred. No. 39;
  Matches   56;  Conservative    0;  Mismatches   56;  Indels    0;  Gaps    0;

Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
             | |||  || | || ||    |    ||  ||   | |  |||  || |  |  |   |||
Db        357 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 298

Qy       2664 CTTTGGCATATAGACGGCTGAGTTTGGGATGATTGTAATTCTAGGTGCTGAT 2715
               ||||||  || || ||| ||  ||    |      | ||| | || ||
Db        297 AATTGGCACGTAAACTGCTTAGAATGCCCGGTCCTCCCCTGTAGATACTCAT 246


RESULT 47
ABA53212/c
ID   ABA53212 standard; DNA; 476 BP.
XX
AC   ABA53212;
XX
DT   01-FEB-2002  (first entry)
XX
DE   Human foetal liver single exon nucleic acid probe #1517.
XX
KW   Human; foetal liver; gene expression; single exon nucleic acid probe; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157277-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US000669.
XX
PR   04-FEB-2000; 2000US-0180312P.
PR   26-MAY-2000; 2000US-0207456P.
PR   30-JUN-2000; 2000US-00608408.
PR   03-AUG-2000; 2000US-00632366.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-483447/52.
XX
PT   Human genome-derived single exon nucleic acid probes useful for analyzing
PT   gene expression in human fetal liver.
XX
PS   Claim 1; SEQ ID NO 1517; 639pp + Sequence Listing; English.
XX
CC   The invention relates to a single exon nucleic acid probe for measuring
CC   human gene expression in a sample derived from human foetal liver. The
CC   single exon nucleic acid probes may be used for predicting, measuring and
CC   displaying gene expression in samples derived from human fetal liver. The
CC   present sequence is a single exon nucleic acid probe of the invention.
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 476 BP; 125 A; 104 C; 99 G; 148 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 22.4;  DB 1;  Length 476;
  Best Local Similarity   50.0%;  Pred. No. 39;
  Matches   56;  Conservative    0;  Mismatches   56;  Indels    0;  Gaps    0;

Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
             | |||  || | || ||    |    ||  ||   | |  |||  || |  |  |   |||
Db        357 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 298

Qy       2664 CTTTGGCATATAGACGGCTGAGTTTGGGATGATTGTAATTCTAGGTGCTGAT 2715
               ||||||  || || ||| ||  ||    |      | ||| | || ||
Db        297 AATTGGCACGTAAACTGCTTAGAATGCCCGGTCCTCCCCTGTAGATACTCAT 246


RESULT 48
AAI32810/c
ID   AAI32810 standard; DNA; 476 BP.
XX
AC   AAI32810;
XX
DT   17-OCT-2001  (first entry)
XX
DE   Probe #1496 used to measure gene expression in human placenta sample.
XX
KW   Probe; microarray; human; placenta; antenatal diagnosis;
KW   genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157272-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US000663.
XX
PR   04-FEB-2000; 2000US-0180312P.
PR   26-MAY-2000; 2000US-0207456P.
PR   30-JUN-2000; 2000US-00608408.
PR   03-AUG-2000; 2000US-00632366.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488897/53.
XX
PT   Human genome-derived single exon nucleic acid probes useful for analyzing
PT   gene expression in human placenta.
XX
PS   Claim 25; SEQ ID NO 1496; 654pp; English.
XX
CC   The present invention relates to single exon nucleic acid probes (SENP).
CC   The present sequence is one such probe. The probes are useful for
CC   producing a microarray for predicting, measuring and displaying gene
CC   expression in samples derived from human placenta. The probes are useful
CC   for antenatal diagnosis of human genetic disorders
XX
SQ   Sequence 476 BP; 125 A; 104 C; 99 G; 148 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 22.4;  DB 1;  Length 476;
  Best Local Similarity   50.0%;  Pred. No. 39;
  Matches   56;  Conservative    0;  Mismatches   56;  Indels    0;  Gaps    0;

Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
             | |||  || | || ||    |    ||  ||   | |  |||  || |  |  |   |||
Db        357 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 298
```

```
Qy       2664 CTTTGGCATATAGACGGCTGAGTTTGGGATGATTGTAATTCTAGGTGCTGAT 2715
              ||||||  || || ||| ||  ||    |      | ||| | || ||
Db        297 AATTGGCACGTAAACTGCTTAGAATGCCCGGTCCTCCCCTGTAGATACTCAT 246
```

RESULT 49
ABA42785/c
ID ABA42785 standard; DNA; 476 BP.
XX
AC ABA42785;
XX
DT 01-FEB-2002 (first entry)
XX
DE Human breast cell single exon nucleic acid probe #1480.
XX
KW Human; microarray; single exon probe; gene expression; breast; disease;
KW cancer; ss.
XX
OS Homo sapiens.
XX
PN WO200157271-A2.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US000662.
XX
PR 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-496933/54.
XX
PT New spatially-addressable set of single exon nucleic acid probes, useful
PT for measuring gene expression in sample derived from human breast,
PT comprises number of single exon nucleic acid probes.
XX
PS Claim 1; SEQ ID NO 1480; 327pp + Sequence Listing; English.
XX
CC The invention relates to a spatially-addressable set of single exon
CC nucleic acid probes for measuring gene expression in a sample derived
CC from human breast and BT 474 cells. The method involves contacting the
CC probes with a collection of detectably labelled nucleic acids derived
CC from mRNA of human breast, and then measuring the label bound to each
CC probe of the microarray. The probes are useful for verifying the
CC expression of regions of genomic DNA predicted to encode proteins. They
CC are useful for gene discovery, and for determining predisposition and/or
CC prognosing breast disease. Gene expression analysis is useful for
CC assessing the toxicity of chemical agents on cells. The microarray of
CC this invention presents a far greater diversity of probes for measuring
CC gene expression, with far less bias than expressed sequence tag
CC microarrays. The method is suitable for rapid production of functional
CC information from genomic sequence. The present sequence is a single exon
CC nucleic acid probe of the invention. Note: The sequence data for this
CC patent did not form part of the printed specification, but was obtained
CC in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 476 BP; 125 A; 104 C; 99 G; 148 T; 0 U; 0 Other;

Query Match 0.8%; Score 22.4; DB 1; Length 476;
Best Local Similarity 50.0%; Pred. No. 39;
Matches 56; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

```
Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
              | |||  || | || ||   |    ||  ||   | |  ||| || |  |  |  |||
Db        357 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 298

Qy       2664 CTTTGGCATATAGACGGCTGAGTTTGGGATGATTGTAATTCTAGGTGCTGAT 2715
              ||||||  || || ||| ||  ||    |      | ||| | || ||
Db        297 AATTGGCACGTAAACTGCTTAGAATGCCCGGTCCTCCCCTGTAGATACTCAT 246
```

RESULT 50
ABA22986/c
ID ABA22986 standard; DNA; 476 BP.
XX
AC ABA22986;
XX
DT 23-JAN-2002 (first entry)
XX
DE Probe #1452 for gene expression analysis in human heart cell sample.
XX
KW Human; gene expression; heart; microarray; vascular system; probe;
KW cardiovascular disease; hypertension; cardiac arrhythmia;
KW congenital heart disease; ss.
XX
OS Homo sapiens.
XX
PN WO200157274-A2.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US000666.
XX
PR 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-488899/53.
XX
PT Single exon nucleic acid probes for analyzing gene expression in human
PT hearts.
XX
PS Claim 1; SEQ ID NO 1452; 530pp; English.
XX
CC The present invention relates to single exon nucleic acid probes for
CC measuring human gene expression in a sample derived from human heart. The
CC present sequence is one such probe. The probes may be used for
CC predicting, measuring and displaying gene expression in samples derived
CC from the human heart via microarrays. By measuring gene expression, the
CC probes are useful for predicting, diagnosing, grading, staging,
CC monitoring and prognosing diseases of the human heart and vascular system
CC e.g. cardiovascular disease, hypertension, cardiac arrhythmias and
CC congenital heart disease. Note: The sequence data for this patent did not
CC form part of the printed specification, but was obtained in electronic
CC format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 476 BP; 125 A; 104 C; 99 G; 148 T; 0 U; 0 Other;

Query Match 0.8%; Score 22.4; DB 1; Length 476;
Best Local Similarity 50.0%; Pred. No. 39;
Matches 56; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

```
Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
              | |||  || | || ||   |    ||  ||   | |  ||| || |  |  |  |||
Db        357 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 298

Qy       2664 CTTTGGCATATAGACGGCTGAGTTTGGGATGATTGTAATTCTAGGTGCTGAT 2715
              ||||||  || || ||| ||  ||    |      | ||| | || ||
Db        297 AATTGGCACGTAAACTGCTTAGAATGCCCGGTCCTCCCCTGTAGATACTCAT 246
```

```
RESULT 51
AAK26907/c
ID   AAK26907 standard; DNA; 476 BP.
XX
AC   AAK26907;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human bone marrow expressed single exon probe SEQ ID NO: 1464.
XX
KW   Human; bone marrow expressed exon; gene expression analysis; probe;
KW   microarray; cancer; leukaemia; lymphoma; myeloma; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157276-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US000668.
XX
PR   04-FEB-2000; 2000US-0180312P.
PR   26-MAY-2000; 2000US-0207456P.
PR   30-JUN-2000; 2000US-00608408.
PR   03-AUG-2000; 2000US-00632366.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488900/53.
XX
PT   Human genome-derived single exon nucleic acid probes useful for analyzing
PT   gene expression in human bone marrow.
XX
PS   Example 4; SEQ ID NO 1464; 658pp + Sequence Listing; English.
XX
CC   The present invention provides a number of single exon nucleic acid
CC   probes which are derived from genomic sequences expressed in the human
CC   bone marrow. They can be used to measure gene expression in bone marrow
CC   samples, which may enable the improved diagnosis and treatment of cancers
CC   such as lymphoma, leukaemia and myeloma. The present sequence is one of
CC   the probes of the invention
XX
SQ   Sequence 476 BP; 125 A; 104 C; 99 G; 148 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 22.4;  DB 1;  Length 476;
  Best Local Similarity   50.0%;  Pred. No. 39;
  Matches   56;  Conservative    0;  Mismatches   56;  Indels    0;  Gaps    0;

Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
              | |||  || | || ||    |    ||  ||   | |  |||  || |  |  |   |||
Db        357 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 298

Qy       2664 CTTTGGCATATAGACGGCTGAGTTTGGGATGATTGTAATTCTAGGTGCTGAT 2715
                ||||||  || || ||| ||  ||     |         | ||| | || ||
Db        297 AATTGGCACGTAAACTGCTTAGAATGCCCGGTCCTCCCCTGTAGATACTCAT 246


RESULT 52
AAK01461/c
ID   AAK01461 standard; DNA; 476 BP.
XX
AC   AAK01461;
XX
DT   05-NOV-2001  (first entry)
XX
DE   Human brain expressed single exon probe SEQ ID NO: 1452.
XX
KW   Human; brain expressed exon; gene expression analysis; probe; microarray;
KW   Alzheimer's disease; multiple sclerosis; schizophrenia; epilepsy; cancer;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   WO200157275-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US000667.
XX
PR   04-FEB-2000; 2000US-0180312P.
PR   26-MAY-2000; 2000US-0207456P.
PR   30-JUN-2000; 2000US-00608408.
PR   03-AUG-2000; 2000US-00632366.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-483446/52.
XX
PT   Single exon nucleic acid probes for analyzing gene expression in human
PT   brains.
XX
PS   Example 4; SEQ ID NO 1452; 650pp + Sequence Listing; English.
XX
CC   The present invention provides a number of single exon nucleic acid
CC   probes which are derived from genomic sequences expressed in the human
CC   brain. They can be used to measure gene expression in brain cell samples,
CC   which may enable the diagnosis and improved treatment of nervous system
CC   diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia,
CC   epilepsy and cancers. The present sequence is one of the probes of the
CC   invention
XX
SQ   Sequence 476 BP; 125 A; 104 C; 99 G; 148 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 22.4;  DB 1;  Length 476;
  Best Local Similarity   50.0%;  Pred. No. 39;
  Matches   56;  Conservative    0;  Mismatches   56;  Indels    0;  Gaps    0;

Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
              | |||  || | || ||    |    ||  ||   | |  |||  || |  |  |   |||
Db        357 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 298

Qy       2664 CTTTGGCATATAGACGGCTGAGTTTGGGATGATTGTAATTCTAGGTGCTGAT 2715
                ||||||  || || ||| ||  ||     |         | ||| | || ||
Db        297 AATTGGCACGTAAACTGCTTAGAATGCCCGGTCCTCCCCTGTAGATACTCAT 246


RESULT 53
ABS26497/c
ID   ABS26497 standard; DNA; 476 BP.
XX
AC   ABS26497;
XX
DT   25-FEB-2003  (first entry)
XX
DE   Human liver single exon probe, SEQ ID No 1487.
XX
KW   Human; single exon nucleic acid probe; liver; cirrhosis;
KW   hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW   coronary heart disease; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157273-A2.
XX
```

PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US000664.
XX
PR 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-488898/53.
XX
PT Human genome-derived single exon nucleic acid probes useful for analyzing
PT gene expression in human adult liver.
XX
PS Claim 1; SEQ ID NO 1487; 658pp; English.
XX
CC The invention relates to a single exon nucleic acid probe (SENP) (I) for
CC measuring human gene expression in a sample derived from human adult
CC liver, comprising one of 13109 defined nucleotide sequences given in the
CC specification (or complements/ fragments). The probe hybridises at high
CC stringency to a nucleic acid molecule expressed in the human adult liver.
CC (I) may be used for predicting, measuring and displaying gene expression
CC in samples derived from human adult liver. The genes identified may be
CC involved in genetic liver diseases such as cirrhosis,
CC hyperlipoproteinaemia, hyperlipidaemia and hypercholesterolaemia which is
CC associated with coronary heart disease. ABS25011-ABS51005 represent human
CC liver single exon nucleic acid probes of the invention. Note: The
CC sequence information for this patent does not appear in the printed
CC specification but was obtained in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 476 BP; 125 A; 104 C; 99 G; 148 T; 0 U; 0 Other;

Query Match 0.8%; Score 22.4; DB 1; Length 476;
Best Local Similarity 50.0%; Pred. No. 39;
Matches 56; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
Db 357 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 298

Qy 2664 CTTTGGCATATAGACGGCTGAGTTTGGGATGATTGTAATTCTAGGTGCTGAT 2715
Db 297 AATTGGCACGTAAACTGCTTAGAATGCCCGGTCCTCCCCTGTAGATACTCAT 246

RESULT 54
AAI01449/c
ID AAI01449 standard; DNA; 476 BP.
XX
AC AAI01449;
XX
DT 09-OCT-2001 (first entry)
XX
DE Probe #1440 used to measure gene expression in human breast sample.
XX
KW Probe; human; breast disease; breast cancer; development disorder; ss;
KW inflammatory disease; proliferative breast disease; non-carcinoma tumour.
XX
OS Homo sapiens.
XX
PN WO200157270-A2.
XX
PD 09-AUG-2001.
XX
PF 29-JAN-2001; 2001WO-US000661.
XX
PR 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-476286/51.
XX
PT Novel single exon nucleic acid probe used to measuring gene expression in
PT a human breast.
XX
PS Claim 25; SEQ ID NO 1440; 322pp; English.
XX
CC The present invention relates to novel single exon nucleic acid probes.
CC The present sequence is one such probe. The probes are useful for
CC measuring human gene expression in a human breast sample, where the probe
CC hybridises at high stringency to a nucleic acid expressed in the human
CC breast. The probes are useful for predicting, diagnosing, grading,
CC staging, monitoring and prognosing diseases of the human breast,
CC particularly those diseases with polygenic aetiology. The diseases
CC include: breast cancer, disorders of development, inflammatory diseases
CC of the breast, fibrocystic changes, proliferative breast disease and non-
CC carcinoma tumours. Note: The sequence data for this patent did not form
CC part of the printed specification, but was obtained in electronic format
CC directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 476 BP; 125 A; 104 C; 99 G; 148 T; 0 U; 0 Other;

Query Match 0.8%; Score 22.4; DB 1; Length 476;
Best Local Similarity 50.0%; Pred. No. 39;
Matches 56; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
Db 357 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 298

Qy 2664 CTTTGGCATATAGACGGCTGAGTTTGGGATGATTGTAATTCTAGGTGCTGAT 2715
Db 297 AATTGGCACGTAAACTGCTTAGAATGCCCGGTCCTCCCCTGTAGATACTCAT 246

RESULT 55
ABS01506/c
ID ABS01506 standard; DNA; 476 BP.
XX
AC ABS01506;
XX
DT 19-AUG-2002 (first entry)
XX
DE Human genome-derived single exon probe from lung SEQ ID No 1497.
XX
KW Human; ds; single exon probe; asthma; lung cancer; COPD; ILD;
KW chronic obstructive pulmonary disease; interstitial lung disease;
KW familial idiopathic pulmonary fibrosis; neurofibromatosis;
KW tuberous sclerosis; Gaucher's disease; Niemann-Pick disease;
KW Hermansky-Pudlak syndrome; sarcoidosis; pulmonary haemosiderosis;
KW pulmonary histiocytosis; lymphangioleiomyomtosis; Karagener syndrome;
KW pulmonary alveolar proteinosis; fibrocystic pulmonary dysplasia;
KW primary ciliary dyskinesis; pulmonary hypertension;
KW hyaline membrane disease.
XX
OS Homo sapiens.
XX
PN WO200186003-A2.
XX
PD 15-NOV-2001.

XX
PF 30-JAN-2001; 2001WO-US000665.
XX
PR 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2002-114183/15.
XX
PT Spatially-addressable set of single exon nucleic acid probes, used to
PT measure gene expression in human lung samples.
XX
PS Claim 1; SEQ ID NO 1497; 634pp; English.
XX
CC The invention relates to a spatially-addressable set of single exon
CC nucleic acid probes for measuring gene expression in a sample derived
CC from human lung comprising single exon nucleic acid probes having one of
CC 12614 nucleic acid sequences mentioned in the specification, or their
CC complements or the 12387 open reading frames derived from the 12614
CC probes. Also included are a microarray comprising the novel set of probes
CC ; the novel set of probes which hybridise at high stringency to a nucleic
CC acid expressed in the human lung; measuring gene expression in a sample
CC derived from human lung, comprising (a) contacting the array with a
CC collection of detectably labeled nucleic acids derived from human lung
CC mRNA, and (b) measuring the label detectably bound to each probe of the
CC array; identifying exons in a eukaryotic genome, comprising (a)
CC algorithmically predicting at least one exon from genomic sequences of
CC the eukaryote; and (b) detecting specific hybridisation of detectably
CC labeled nucleic acids from eukaryote lung mRNA, to a single exon probe,
CC having a fragment identical to the predicted exon, the probe is included
CC in the above mentioned microarray; assigning exons to a single gene,
CC comprising (a) identifying exons from genomic sequence by the method
CC above and (b) measuring the expression of each of the exons in several
CC tissues and/or cell types using hybridisation to a single exon
CC microarrays having a probe with the exon, where a common pattern of
CC expression of the exons in the tissues and/or cell types indicates that
CC the exons should be assigned to a single gene; a peptide comprising one
CC of 12011 sequences, mentioned in the specification, or encoded by the
CC probes/open reading frames (ORF). The probes are used for gene expression
CC analysis, and for identifying exons in a gene, particularly using human
CC lung derived mRNA and for the study of lung diseases such as asthma, lung
CC cancer, chronic obstructive pulmonary disease (COPD), interstitial lung
CC disease (ILD), familial idiopathic pulmonary fibrosis, neurofibromatosis,
CC tuberous sclerosis, Gaucher's disease, Niemann-Pick disease, Hermansky-
CC Pudlak syndrome, sarcoidosis, pulmonary haemosiderosis, pulmonary
CC histiocytosis, lymphangioleiomyomtosis, pulmonary alveolar proteinosis,
CC Karagener syndrome, fibrocystic pulmonary dysplasia, primary ciliary
CC dyskinesis, pulmonary hypertension and hyaline membrane disease. The
CC present sequence is a single exon probe of the invention. Note: The
CC sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 476 BP; 125 A; 104 C; 99 G; 148 T; 0 U; 0 Other;

Query Match 0.8%; Score 22.4; DB 1; Length 476;
Best Local Similarity 50.0%; Pred. No. 39;
Matches 56; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
Db 357 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 298

Qy 2664 CTTTGGCATATAGACGGCTGAGTTTGGGATGATTGTAATTCTAGGTGCTGAT 2715

Db 297 AATTGGCACGTAAACTGCTTAGAATGCCCGGTCCTCCCCTGTAGATACTCAT 246

RESULT 56
AAI19676/c
ID AAI19676 standard; DNA; 301 BP.
XX
AC AAI19676;
XX
DT 12-OCT-2001 (first entry)
XX
DE Probe #9609 for gene expression analysis in human cervical cell sample.
XX
KW Probe; human; microarray; gene expression; cervical epithelial cell;
KW cervical cancer; ss.
XX
OS Homo sapiens.
XX
PN WO200157278-A2.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US000670.
XX
PR 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-488901/53.
XX
PT Human genome-derived single exon nucleic acid probes useful for analyzing
PT gene expression in human cervical epithelial cells.
XX
PS Claim 25; SEQ ID NO 9609; 487pp; English.
XX
CC The present invention relates to human single exon nucleic acid probes
CC (SENP). The present sequence is one such probe. The SENPs are derived
CC from human HeLa cells. The SENPs can be used to produce a single exon
CC microarray, which can be used for measuring human gene expression in a
CC sample derived from human cervical epithelial cells. By measuring gene
CC expression, the probes are therefore useful in grading and/or staging of
CC diseases of the cervix, notably cervical cancer. Note: The sequence data
CC for this patent did not form part of the printed specification, but was
CC obtained in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 301 BP; 100 A; 54 C; 118 G; 29 T; 0 U; 0 Other;

Query Match 0.8%; Score 22.2; DB 1; Length 301;
Best Local Similarity 58.2%; Pred. No. 38;
Matches 39; Conservative 0; Mismatches 28; Indels 0; Gaps 0;

Qy 2168 TTTGACCTGCCTTCTTCCCCTTCCTCTATTCCTTTGGTTTTTGCATAGTGTCTCTGGCTT 2227
Db 277 TCTCGCCTGCTTACCTCTCGCCTCTCAATTTCTTTCCTCCTCTCCTCCTCTCTCTGCCGT 218

Qy 2228 CCTGGAT 2234
Db 217 TCTAGCT 211

RESULT 57
ABA64702/c
ID ABA64702 standard; DNA; 301 BP.
XX

```
AC   ABA64702;
XX
DT   01-FEB-2002  (first entry)
XX
DE   Human foetal liver single exon nucleic acid probe #13007.
XX
KW   Human; foetal liver; gene expression; single exon nucleic acid probe; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157277-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US000669.
XX
PR   04-FEB-2000; 2000US-0180312P.
PR   26-MAY-2000; 2000US-0207456P.
PR   30-JUN-2000; 2000US-00608408.
PR   03-AUG-2000; 2000US-00632366.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-483447/52.
XX
PT   Human genome-derived single exon nucleic acid probes useful for analyzing
PT   gene expression in human fetal liver.
XX
PS   Claim 4; SEQ ID NO 13007; 639pp + Sequence Listing; English.
XX
CC   The invention relates to a single exon nucleic acid probe for measuring
CC   human gene expression in a sample derived from human foetal liver. The
CC   single exon nucleic acid probes may be used for predicting, measuring and
CC   displaying gene expression in samples derived from human fetal liver. The
CC   present sequence is a single exon nucleic acid probe of the invention.
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 301 BP; 100 A; 54 C; 118 G; 29 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 22.2;  DB 1;  Length 301;
  Best Local Similarity   58.2%;  Pred. No. 38;
  Matches   39;  Conservative    0;  Mismatches   28;  Indels    0;  Gaps    0;

Qy       2168 TTTGACCTGCCTTCTTCCCCTTCCTCTATTCCTTTGGTTTTTGCATAGTGTCTCTGGCTT 2227
                | |  ||||| | | || |    ||| ||| ||||  |  |  | |  | ||||||| | |
Db        277 TCTCGCCTGCTTACCTCTCGCCTCTCAATTTCTTTCCTCCTCTCCTCCTCTCTCTGCCGT 218

Qy       2228 CCTGGAT 2234
                || | |
Db        217 TCTAGCT 211


RESULT 58
AAI44871/c
ID   AAI44871 standard; DNA; 301 BP.
XX
AC   AAI44871;
XX
DT   17-OCT-2001  (first entry)
XX
DE   Probe #13557 used to measure gene expression in human placenta sample.
XX
KW   Probe; microarray; human; placenta; antenatal diagnosis;
KW   genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157272-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US000663.
XX
PR   04-FEB-2000; 2000US-0180312P.
PR   26-MAY-2000; 2000US-0207456P.
PR   30-JUN-2000; 2000US-00608408.
PR   03-AUG-2000; 2000US-00632366.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488897/53.
XX
PT   Human genome-derived single exon nucleic acid probes useful for analyzing
PT   gene expression in human placenta.
XX
PS   Claim 25; SEQ ID NO 13557; 654pp; English.
XX
CC   The present invention relates to single exon nucleic acid probes (SENP).
CC   The present sequence is one such probe. The probes are useful for
CC   producing a microarray for predicting, measuring and displaying gene
CC   expression in samples derived from human placenta. The probes are useful
CC   for antenatal diagnosis of human genetic disorders
XX
SQ   Sequence 301 BP; 100 A; 54 C; 118 G; 29 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 22.2;  DB 1;  Length 301;
  Best Local Similarity   58.2%;  Pred. No. 38;
  Matches   39;  Conservative    0;  Mismatches   28;  Indels    0;  Gaps    0;

Qy       2168 TTTGACCTGCCTTCTTCCCCTTCCTCTATTCCTTTGGTTTTTGCATAGTGTCTCTGGCTT 2227
                | |  ||||| | | || |    ||| ||| ||||  |  |  | |  | ||||||| | |
Db        277 TCTCGCCTGCTTACCTCTCGCCTCTCAATTTCTTTCCTCCTCTCCTCCTCTCTCTGCCGT 218

Qy       2228 CCTGGAT 2234
                || | |
Db        217 TCTAGCT 211


RESULT 59
ABA46822/c
ID   ABA46822 standard; DNA; 301 BP.
XX
AC   ABA46822;
XX
DT   01-FEB-2002  (first entry)
XX
DE   Human breast cell single exon nucleic acid probe #5517.
XX
KW   Human; microarray; single exon probe; gene expression; breast; disease;
KW   cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157271-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US000662.
XX
PR   04-FEB-2000; 2000US-0180312P.
PR   26-MAY-2000; 2000US-0207456P.
PR   30-JUN-2000; 2000US-00608408.
PR   03-AUG-2000; 2000US-00632366.
PR   21-SEP-2000; 2000US-0234687P.
```

PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-496933/54.
XX
PT New spatially-addressable set of single exon nucleic acid probes, useful
PT for measuring gene expression in sample derived from human breast,
PT comprises number of single exon nucleic acid probes.
XX
PS Claim 4; SEQ ID NO 5517; 327pp + Sequence Listing; English.
XX
CC The invention relates to a spatially-addressable set of single exon
CC nucleic acid probes for measuring gene expression in a sample derived
CC from human breast and BT 474 cells. The method involves contacting the
CC probes with a collection of detectably labelled nucleic acids derived
CC from mRNA of human breast, and then measuring the label bound to each
CC probe of the microarray. The probes are useful for verifying the
CC expression of regions of genomic DNA predicted to encode proteins. They
CC are useful for gene discovery, and for determining predisposition and/or
CC prognosing breast disease. Gene expression analysis is useful for
CC assessing the toxicity of chemical agents on cells. The microarray of
CC this invention presents a far greater diversity of probes for measuring
CC gene expression, with far less bias than expressed sequence tag
CC microarrays. The method is suitable for rapid production of functional
CC information from genomic sequence. The present sequence is a single exon
CC nucleic acid probe of the invention. Note: The sequence data for this
CC patent did not form part of the printed specification, but was obtained
CC in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 301 BP; 100 A; 54 C; 118 G; 29 T; 0 U; 0 Other;

Query Match 0.8%; Score 22.2; DB 1; Length 301;
Best Local Similarity 58.2%; Pred. No. 38;
Matches 39; Conservative 0; Mismatches 28; Indels 0; Gaps 0;

Qy 2168 TTTGACCTGCCTTCTTCCCCTTCCTCTATTCCTTTGGTTTTTGCATAGTGTCTCTGGCTT 2227
Db 277 TCTCGCCTGCTTACCTCTCGCCTCTCAATTTCTTTCCTCCTCTCCTCCTCTCTCTGCCGT 218

Qy 2228 CCTGGAT 2234
Db 217 TCTAGCT 211

RESULT 60
ABA31826/c
ID ABA31826 standard; DNA; 301 BP.
XX
AC ABA31826;
XX
DT 23-JAN-2002 (first entry)
XX
DE Probe #10292 for gene expression analysis in human heart cell sample.
XX
KW Human; gene expression; heart; microarray; vascular system; probe;
KW cardiovascular disease; hypertension; cardiac arrhythmia;
KW congenital heart disease; ss.
XX
OS Homo sapiens.
XX
PN WO200157274-A2.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US000666.
XX
PR 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-488899/53.
XX
PT Single exon nucleic acid probes for analyzing gene expression in human
PT hearts.
XX
PS Claim 4; SEQ ID NO 10292; 530pp; English.
XX
CC The present invention relates to single exon nucleic acid probes for
CC measuring human gene expression in a sample derived from human heart. The
CC present sequence is one such probe. The probes may be used for
CC predicting, measuring and displaying gene expression in samples derived
CC from the human heart via microarrays. By measuring gene expression, the
CC probes are useful for predicting, diagnosing, grading, staging,
CC monitoring and prognosing diseases of the human heart and vascular system
CC e.g. cardiovascular disease, hypertension, cardiac arrhythmias and
CC congenital heart disease. Note: The sequence data for this patent did not
CC form part of the printed specification, but was obtained in electronic
CC format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 301 BP; 100 A; 54 C; 118 G; 29 T; 0 U; 0 Other;

Query Match 0.8%; Score 22.2; DB 1; Length 301;
Best Local Similarity 58.2%; Pred. No. 38;
Matches 39; Conservative 0; Mismatches 28; Indels 0; Gaps 0;

Qy 2168 TTTGACCTGCCTTCTTCCCCTTCCTCTATTCCTTTGGTTTTTGCATAGTGTCTCTGGCTT 2227
Db 277 TCTCGCCTGCTTACCTCTCGCCTCTCAATTTCTTTCCTCCTCTCCTCCTCTCTCTGCCGT 218

Qy 2228 CCTGGAT 2234
Db 217 TCTAGCT 211

RESULT 61
AAK38868/c
ID AAK38868 standard; DNA; 301 BP.
XX
AC AAK38868;
XX
DT 06-NOV-2001 (first entry)
XX
DE Human bone marrow expressed single exon probe SEQ ID NO: 13425.
XX
KW Human; bone marrow expressed exon; gene expression analysis; probe;
KW microarray; cancer; leukaemia; lymphoma; myeloma; ss.
XX
OS Homo sapiens.
XX
PN WO200157276-A2.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US000668.
XX
PR 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX

PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-488900/53.
XX
PT Human genome-derived single exon nucleic acid probes useful for analyzing
PT gene expression in human bone marrow.
XX
PS Example 4; SEQ ID NO 13425; 658pp + Sequence Listing; English.
XX
CC The present invention provides a number of single exon nucleic acid
CC probes which are derived from genomic sequences expressed in the human
CC bone marrow. They can be used to measure gene expression in bone marrow
CC samples, which may enable the improved diagnosis and treatment of cancers
CC such as lymphoma, leukaemia and myeloma. The present sequence is one of
CC the probes of the invention
XX
SQ Sequence 301 BP; 100 A; 54 C; 118 G; 29 T; 0 U; 0 Other;

Query Match 0.8%; Score 22.2; DB 1; Length 301;
Best Local Similarity 58.2%; Pred. No. 38;
Matches 39; Conservative 0; Mismatches 28; Indels 0; Gaps 0;

Qy 2168 TTTGACCTGCCTTCTTCCCCTTCCTCTATTCCTTTGGTTTTTGCATAGTGTCTCTGGCTT 2227
Db 277 TCTCGCCTGCTTACCTCTCGCCTCTCAATTTCTTTCCTCCTCTCCTCCTCTCTCTGCCGT 218

Qy 2228 CCTGGAT 2234
Db 217 TCTAGCT 211

RESULT 62
AAK13137/c
ID AAK13137 standard; DNA; 301 BP.
XX
AC AAK13137;
XX
DT 05-NOV-2001 (first entry)
XX
DE Human brain expressed single exon probe SEQ ID NO: 13128.
XX
KW Human; brain expressed exon; gene expression analysis; probe; microarray;
KW Alzheimer's disease; multiple sclerosis; schizophrenia; epilepsy; cancer;
KW ss.
XX
OS Homo sapiens.
XX
PN WO200157275-A2.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US000667.
XX
PR 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-483446/52.
XX
PT Single exon nucleic acid probes for analyzing gene expression in human
PT brains.
XX
PS Example 4; SEQ ID NO 13128; 650pp + Sequence Listing; English.
XX
CC The present invention provides a number of single exon nucleic acid
CC probes which are derived from genomic sequences expressed in the human
CC brain. They can be used to measure gene expression in brain cell samples,
CC which may enable the diagnosis and improved treatment of nervous system
CC diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia,
CC epilepsy and cancers. The present sequence is one of the probes of the
CC invention
XX
SQ Sequence 301 BP; 100 A; 54 C; 118 G; 29 T; 0 U; 0 Other;

Query Match 0.8%; Score 22.2; DB 1; Length 301;
Best Local Similarity 58.2%; Pred. No. 38;
Matches 39; Conservative 0; Mismatches 28; Indels 0; Gaps 0;

Qy 2168 TTTGACCTGCCTTCTTCCCCTTCCTCTATTCCTTTGGTTTTTGCATAGTGTCTCTGGCTT 2227
Db 277 TCTCGCCTGCTTACCTCTCGCCTCTCAATTTCTTTCCTCCTCTCCTCCTCTCTCTGCCGT 218

Qy 2228 CCTGGAT 2234
Db 217 TCTAGCT 211

RESULT 63
ABS38453/c
ID ABS38453 standard; DNA; 301 BP.
XX
AC ABS38453;
XX
DT 25-FEB-2003 (first entry)
XX
DE Human liver single exon probe, SEQ ID No 13443.
XX
KW Human; single exon nucleic acid probe; liver; cirrhosis;
KW hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW coronary heart disease; ss.
XX
OS Homo sapiens.
XX
PN WO200157273-A2.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US000664.
XX
PR 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-488898/53.
XX
PT Human genome-derived single exon nucleic acid probes useful for analyzing
PT gene expression in human adult liver.
XX
PS Claim 4; SEQ ID NO 13443; 658pp; English.
XX
CC The invention relates to a single exon nucleic acid probe (SENP) (I) for
CC measuring human gene expression in a sample derived from human adult
CC liver, comprising one of 13109 defined nucleotide sequences given in the
CC specification (or complements/ fragments). The probe hybridises at high
CC stringency to a nucleic acid molecule expressed in the human adult liver.
CC (I) may be used for predicting, measuring and displaying gene expression
CC in samples derived from human adult liver. The genes identified may be
CC involved in genetic liver diseases such as cirrhosis,

CC hyperlipoproteinaemia, hyperlipidaemia and hypercholesterolaemia which is
CC associated with coronary heart disease. ABS25011-ABS51005 represent human
CC liver single exon nucleic acid probes of the invention. Note: The
CC sequence information for this patent does not appear in the printed
CC specification but was obtained in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 301 BP; 100 A; 54 C; 118 G; 29 T; 0 U; 0 Other;

Query Match 0.8%; Score 22.2; DB 1; Length 301;
Best Local Similarity 58.2%; Pred. No. 38;
Matches 39; Conservative 0; Mismatches 28; Indels 0; Gaps 0;

Qy 2168 TTTGACCTGCCTTCTTCCCCTTCCTCTATTCCTTTGGTTTTTGCATAGTGTCTCTGGCTT 2227
Db 277 TCTCGCCTGCTTACCTCTCGCCTCTCAATTTCTTTCCTCCTCTCCTCCTCTCTCTGCCGT 218

Qy 2228 CCTGGAT 2234
Db 217 TCTAGCT 211

RESULT 64
AAI05395/c
ID AAI05395 standard; DNA; 301 BP.
XX
AC AAI05395;
XX
DT 09-OCT-2001 (first entry)
XX
DE Probe #5386 used to measure gene expression in human breast sample.
XX
KW Probe; human; breast disease; breast cancer; development disorder; ss;
KW inflammatory disease; proliferative breast disease; non-carcinoma tumour.
XX
OS Homo sapiens.
XX
PN WO200157270-A2.
XX
PD 09-AUG-2001.
XX
PF 29-JAN-2001; 2001WO-US000661.
XX
PR 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-476286/51.
XX
PT Novel single exon nucleic acid probe used to measuring gene expression in
PT a human breast.
XX
PS Claim 25; SEQ ID NO 5386; 322pp; English.
XX
CC The present invention relates to novel single exon nucleic acid probes.
CC The present sequence is one such probe. The probes are useful for
CC measuring human gene expression in a human breast sample, where the probe
CC hybridises at high stringency to a nucleic acid expressed in the human
CC breast. The probes are useful for predicting, diagnosing, grading,
CC staging, monitoring and prognosing diseases of the human breast,
CC particularly those diseases with polygenic aetiology. The diseases
CC include: breast cancer, disorders of development, inflammatory diseases
CC of the breast, fibrocystic changes, proliferative breast disease and non-
CC carcinoma tumours. Note: The sequence data for this patent did not form
CC part of the printed specification, but was obtained in electronic format
CC directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 301 BP; 100 A; 54 C; 118 G; 29 T; 0 U; 0 Other;

Query Match 0.8%; Score 22.2; DB 1; Length 301;
Best Local Similarity 58.2%; Pred. No. 38;
Matches 39; Conservative 0; Mismatches 28; Indels 0; Gaps 0;

Qy 2168 TTTGACCTGCCTTCTTCCCCTTCCTCTATTCCTTTGGTTTTTGCATAGTGTCTCTGGCTT 2227
Db 277 TCTCGCCTGCTTACCTCTCGCCTCTCAATTTCTTTCCTCCTCTCCTCCTCTCTCTGCCGT 218

Qy 2228 CCTGGAT 2234
Db 217 TCTAGCT 211

RESULT 65
ABS12949/c
ID ABS12949 standard; DNA; 301 BP.
XX
AC ABS12949;
XX
DT 19-AUG-2002 (first entry)
XX
DE Human genome-derived single exon probe ORF from lung SEQ ID No 12940.
XX
KW Human; ds; single exon probe; asthma; lung cancer; COPD; ILD;
KW chronic obstructive pulmonary disease; interstitial lung disease;
KW familial idiopathic pulmonary fibrosis; neurofibromatosis;
KW tuberous sclerosis; Gaucher's disease; Niemann-Pick disease;
KW Hermansky-Pudlak syndrome; sarcoidosis; pulmonary haemosiderosis;
KW pulmonary histiocytosis; lymphangioleiomyomtosis; Karagener syndrome;
KW pulmonary alveolar proteinosis; fibrocystic pulmonary dysplasia;
KW primary ciliary dyskinesis; pulmonary hypertension;
KW hyaline membrane disease; open reading frame; ORF.
XX
OS Homo sapiens.
XX
PN WO200186003-A2.
XX
PD 15-NOV-2001.
XX
PF 30-JAN-2001; 2001WO-US000665.
XX
PR 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2002-114183/15.
XX
PT Spatially-addressable set of single exon nucleic acid probes, used to
PT measure gene expression in human lung samples.
XX
PS Claim 4; SEQ ID NO 12940; 634pp; English.
XX
CC The invention relates to a spatially-addressable set of single exon
CC nucleic acid probes for measuring gene expression in a sample derived
CC from human lung comprising single exon nucleic acid probes having one of
CC 12614 nucleic acid sequences mentioned in the specification, or their
CC complements or the 12387 open reading frames derived from the 12614
CC probes. Also included are a microarray comprising the novel set of probes
CC ; the novel set of probes which hybridise at high stringency to a nucleic
CC acid expressed in the human lung; measuring gene expression in a sample
CC derived from human lung, comprising (a) contacting the array with a

```
CC   collection of detectably labeled nucleic acids derived from human lung
CC   mRNA, and (b) measuring the label detectably bound to each probe of the
CC   array; identifying exons in a eukaryotic genome, comprising (a)
CC   algorithmically predicting at least one exon from genomic sequences of
CC   the eukaryote; and (b) detecting specific hybridisation of detectably
CC   labeled nucleic acids from eukaryote lung mRNA, to a single exon probe,
CC   having a fragment identical to the predicted exon, the probe is included
CC   in the above mentioned microarray; assigning exons to a single gene,
CC   comprising (a) identifying exons from genomic sequence by the method
CC   above and (b) measuring the expression of each of the exons in several
CC   tissues and/or cell types using hybridisation to a single exon
CC   microarrays having a probe with the exon, where a common pattern of
CC   expression of the exons in the tissues and/or cell types indicates that
CC   the exons should be assigned to a single gene; a peptide comprising one
CC   of 12011 sequences, mentioned in the specification, or encoded by the
CC   probes/open reading frames (ORF). The probes are used for gene expression
CC   analysis, and for identifying exons in a gene, particularly using human
CC   lung derived mRNA and for the study of lung diseases such as asthma, lung
CC   cancer, chronic obstructive pulmonary disease (COPD), interstitial lung
CC   disease (ILD), familial idiopathic pulmonary fibrosis, neurofibromatosis,
CC   tuberous sclerosis, Gaucher's disease, Niemann-Pick disease, Hermansky-
CC   Pudlak syndrome, sarcoidosis, pulmonary haemosiderosis, pulmonary
CC   histiocytosis, lymphangioleiomyomtosis, pulmonary alveolar proteinosis,
CC   Karagener syndrome, fibrocystic pulmonary dysplasia, primary ciliary
CC   dyskinesis, pulmonary hypertension and hyaline membrane disease. The
CC   present sequence is a single exon probe open reading frame of the
CC   invention. Note: The sequence data for this patent did not form part of
CC   the printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 301 BP; 100 A; 54 C; 118 G; 29 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 22.2;  DB 1;  Length 301;
  Best Local Similarity   58.2%;  Pred. No. 38;
  Matches   39;  Conservative    0;  Mismatches   28;  Indels    0;  Gaps    0;

Qy       2168 TTTGACCTGCCTTCTTCCCCTTCCTCTATTCCTTTGGTTTTTGCATAGTGTCTCTGGCTT 2227
                | |  ||||| | | || |    ||| ||| |||| |  |  | |  | |||||| | |
Db        277 TCTCGCCTGCTTACCTCTCGCCTCTCAATTTCTTTCCTCCTCTCCTCCTCTCTCTGCCGT 218

Qy       2228 CCTGGAT 2234
                || | |
Db        217 TCTAGCT 211


RESULT 66
ABA79626/c
ID   ABA79626 standard; DNA; 121 BP.
XX
AC   ABA79626;
XX
DT   24-JAN-2002  (first entry)
XX
DE   Factor IX mutation correcting oligonucleotide SEQ ID NO: 2472.
XX
KW   Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW   retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW   cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW   adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW   haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW   mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW   familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW   UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW   Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW   antilipemic; ss.
XX
OS   Homo sapiens.
XX
PN   WO200173002-A2.
XX
PD   04-OCT-2001.
XX
PF   27-MAR-2001; 2001WO-US009761.
XX
PR   27-MAR-2000; 2000US-0192176P.
PR   27-MAR-2000; 2000US-0192179P.
PR   01-JUN-2000; 2000US-0208538P.
PR   30-OCT-2000; 2000US-0244989P.
XX
PA   (UYDE ) UNIV DELAWARE.
XX
PI   Kmiec EB,  Gamper HB,  Rice MC;
XX
DR   WPI; 2001-639230/73.
XX
PT   Oligonucleotide for targeted alterations of genetic sequences and for
PT   treating cystic fibrosis, comprises at least one mismatch and chemical
PT   modification.
XX
PS   Claim 7; Page 184; 294pp; English.
XX
CC   The present invention provides single-stranded oligonucleotides which can
CC   be used for the targeted alteration of genomic sequences, where the
CC   oligonucleotide has at least one mismatch compared with the genomic
CC   sequence to be altered. In particular, these sequences are directed at
CC   the following genes: adenosine deaminase, p53, beta-globin,
CC   retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC   (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC   1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC   apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC   (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC   presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC   such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC   haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC   Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC   various syndromes. The present sequence is one of the gene correcting
CC   oligonucleotides of the invention
XX
SQ   Sequence 121 BP; 36 A; 23 C; 25 G; 37 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 22;  DB 1;  Length 121;
  Best Local Similarity   53.5%;  Pred. No. 32;
  Matches   46;  Conservative    0;  Mismatches   40;  Indels    0;  Gaps    0;

Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
                | |||  || | || ||   |    ||  ||   | |  |||  || | |  |   |||
Db         88 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 29

Qy       2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
                ||||||  || || ||| ||  ||
Db         28 AATTGGCACGTAAACTGCTTAGAATG 3


RESULT 67
ABA79623
ID   ABA79623 standard; DNA; 121 BP.
XX
AC   ABA79623;
XX
DT   24-JAN-2002  (first entry)
XX
DE   Factor IX mutation correcting oligonucleotide SEQ ID NO: 2469.
XX
KW   Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW   retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW   cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW   adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW   haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW   mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW   familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW   UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW   Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW   antilipemic; ss.
XX
OS   Homo sapiens.
XX
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PN WO200173002-A2.
XX
PD 04-OCT-2001.
XX
PF 27-MAR-2001; 2001WO-US009761.
XX
PR 27-MAR-2000; 2000US-0192176P.
PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Gamper HB, Rice MC;
XX
DR WPI; 2001-639230/73.
XX
PT Oligonucleotide for targeted alterations of genetic sequences and for
PT treating cystic fibrosis, comprises at least one mismatch and chemical
PT modification.
XX
PS Claim 7; Page 184; 294pp; English.
XX
CC The present invention provides single-stranded oligonucleotides which can
CC be used for the targeted alteration of genomic sequences, where the
CC oligonucleotide has at least one mismatch compared with the genomic
CC sequence to be altered. In particular, these sequences are directed at
CC the following genes: adenosine deaminase, p53, beta-globin,
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC various syndromes. The present sequence is one of the gene correcting
CC oligonucleotides of the invention
XX
SQ Sequence 121 BP; 37 A; 24 C; 23 G; 37 T; 0 U; 0 Other;

Query Match 0.8%; Score 22; DB 1; Length 121;
Best Local Similarity 53.5%; Pred. No. 32;
Matches 46; Conservative 0; Mismatches 40; Indels 0; Gaps 0;

Qy 2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
Db 35 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 94

Qy 2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
Db 95 AATTGGCACGTAAACTGCTTAGAATG 120

RESULT 68
ABA79622/c
ID ABA79622 standard; DNA; 121 BP.
XX
AC ABA79622;
XX
DT 24-JAN-2002 (first entry)
XX
DE Factor IX mutation correcting oligonucleotide SEQ ID NO: 2468.
XX
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW antilipemic; ss.
XX
OS Homo sapiens.
XX
PN WO200173002-A2.
XX
PD 04-OCT-2001.
XX
PF 27-MAR-2001; 2001WO-US009761.
XX
PR 27-MAR-2000; 2000US-0192176P.
PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Gamper HB, Rice MC;
XX
DR WPI; 2001-639230/73.
XX
PT Oligonucleotide for targeted alterations of genetic sequences and for
PT treating cystic fibrosis, comprises at least one mismatch and chemical
PT modification.
XX
PS Claim 7; Page 184; 294pp; English.
XX
CC The present invention provides single-stranded oligonucleotides which can
CC be used for the targeted alteration of genomic sequences, where the
CC oligonucleotide has at least one mismatch compared with the genomic
CC sequence to be altered. In particular, these sequences are directed at
CC the following genes: adenosine deaminase, p53, beta-globin,
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC various syndromes. The present sequence is one of the gene correcting
CC oligonucleotides of the invention
XX
SQ Sequence 121 BP; 37 A; 23 C; 24 G; 37 T; 0 U; 0 Other;

Query Match 0.8%; Score 22; DB 1; Length 121;
Best Local Similarity 53.5%; Pred. No. 32;
Matches 46; Conservative 0; Mismatches 40; Indels 0; Gaps 0;

Qy 2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
Db 87 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 28

Qy 2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
Db 27 AATTGGCACGTAAACTGCTTAGAATG 2

RESULT 69
ABA79634/c
ID ABA79634 standard; DNA; 121 BP.
XX
AC ABA79634;
XX
DT 24-JAN-2002 (first entry)
XX
DE Factor IX mutation correcting oligonucleotide SEQ ID NO: 2480.
XX
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;

KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW antilipemic; ss.
XX
OS Homo sapiens.
XX
PN WO200173002-A2.
XX
PD 04-OCT-2001.
XX
PF 27-MAR-2001; 2001WO-US009761.
XX
PR 27-MAR-2000; 2000US-0192176P.
PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Gamper HB, Rice MC;
XX
DR WPI; 2001-639230/73.
XX
PT Oligonucleotide for targeted alterations of genetic sequences and for
PT treating cystic fibrosis, comprises at least one mismatch and chemical
PT modification.
XX
PS Claim 7; Page 184; 294pp; English.
XX
CC The present invention provides single-stranded oligonucleotides which can
CC be used for the targeted alteration of genomic sequences, where the
CC oligonucleotide has at least one mismatch compared with the genomic
CC sequence to be altered. In particular, these sequences are directed at
CC the following genes: adenosine deaminase, p53, beta-globin,
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC various syndromes. The present sequence is one of the gene correcting
CC oligonucleotides of the invention
XX
SQ Sequence 121 BP; 37 A; 23 C; 23 G; 38 T; 0 U; 0 Other;

Query Match 0.8%; Score 22; DB 1; Length 121;
Best Local Similarity 53.5%; Pred. No. 32;
Matches 46; Conservative 0; Mismatches 40; Indels 0; Gaps 0;

```
Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
             | |||  || | || ||    |    ||  ||   | |  |||  || |  |  |   |||
Db         86 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 27

Qy       2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
                ||||||  || || ||| ||  ||
Db         26 AATTGGCACGTAAACTGCTTAGAATG 1
```

RESULT 70
ABA79627
ID ABA79627 standard; DNA; 121 BP.
XX
AC ABA79627;
XX
DT 24-JAN-2002 (first entry)
XX
DE Factor IX mutation correcting oligonucleotide SEQ ID NO: 2473.
XX
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW antilipemic; ss.
XX
OS Homo sapiens.
XX
PN WO200173002-A2.
XX
PD 04-OCT-2001.
XX
PF 27-MAR-2001; 2001WO-US009761.
XX
PR 27-MAR-2000; 2000US-0192176P.
PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Gamper HB, Rice MC;
XX
DR WPI; 2001-639230/73.
XX
PT Oligonucleotide for targeted alterations of genetic sequences and for
PT treating cystic fibrosis, comprises at least one mismatch and chemical
PT modification.
XX
PS Claim 7; Page 184; 294pp; English.
XX
CC The present invention provides single-stranded oligonucleotides which can
CC be used for the targeted alteration of genomic sequences, where the
CC oligonucleotide has at least one mismatch compared with the genomic
CC sequence to be altered. In particular, these sequences are directed at
CC the following genes: adenosine deaminase, p53, beta-globin,
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC various syndromes. The present sequence is one of the gene correcting
CC oligonucleotides of the invention
XX
SQ Sequence 121 BP; 37 A; 25 C; 23 G; 36 T; 0 U; 0 Other;

Query Match 0.8%; Score 22; DB 1; Length 121;
Best Local Similarity 53.5%; Pred. No. 32;
Matches 46; Conservative 0; Mismatches 40; Indels 0; Gaps 0;

```
Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
             | |||  || | || ||    |    ||  ||   | |  |||  || |  |  |   |||
Db         34 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 93

Qy       2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
                ||||||  || || ||| ||  ||
Db         94 AATTGGCACGTAAACTGCTTAGAATG 119
```

RESULT 71
ABA79631
ID ABA79631 standard; DNA; 121 BP.

XX
AC ABA79631;
XX
DT 24-JAN-2002 (first entry)
XX
DE Factor IX mutation correcting oligonucleotide SEQ ID NO: 2477.
XX
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW antilipemic; ss.
XX
OS Homo sapiens.
XX
PN WO200173002-A2.
XX
PD 04-OCT-2001.
XX
PF 27-MAR-2001; 2001WO-US009761.
XX
PR 27-MAR-2000; 2000US-0192176P.
PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Gamper HB, Rice MC;
XX
DR WPI; 2001-639230/73.
XX
PT Oligonucleotide for targeted alterations of genetic sequences and for
PT treating cystic fibrosis, comprises at least one mismatch and chemical
PT modification.
XX
PS Claim 7; Page 184; 294pp; English.
XX
CC The present invention provides single-stranded oligonucleotides which can
CC be used for the targeted alteration of genomic sequences, where the
CC oligonucleotide has at least one mismatch compared with the genomic
CC sequence to be altered. In particular, these sequences are directed at
CC the following genes: adenosine deaminase, p53, beta-globin,
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC various syndromes. The present sequence is one of the gene correcting
CC oligonucleotides of the invention
XX
SQ Sequence 121 BP; 37 A; 26 C; 23 G; 35 T; 0 U; 0 Other;

Query Match 0.8%; Score 22; DB 1; Length 121;
Best Local Similarity 53.5%; Pred. No. 32;
Matches 46; Conservative 0; Mismatches 40; Indels 0; Gaps 0;

Qy 2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
Db 33 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 92

Qy 2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
Db 93 AATTGGCACGTAAACTGCTTAGAATG 118

RESULT 72
ABA79635
ID ABA79635 standard; DNA; 121 BP.
XX
AC ABA79635;
XX
DT 24-JAN-2002 (first entry)
XX
DE Factor IX mutation correcting oligonucleotide SEQ ID NO: 2481.
XX
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW antilipemic; ss.
XX
OS Homo sapiens.
XX
PN WO200173002-A2.
XX
PD 04-OCT-2001.
XX
PF 27-MAR-2001; 2001WO-US009761.
XX
PR 27-MAR-2000; 2000US-0192176P.
PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Gamper HB, Rice MC;
XX
DR WPI; 2001-639230/73.
XX
PT Oligonucleotide for targeted alterations of genetic sequences and for
PT treating cystic fibrosis, comprises at least one mismatch and chemical
PT modification.
XX
PS Claim 7; Page 184; 294pp; English.
XX
CC The present invention provides single-stranded oligonucleotides which can
CC be used for the targeted alteration of genomic sequences, where the
CC oligonucleotide has at least one mismatch compared with the genomic
CC sequence to be altered. In particular, these sequences are directed at
CC the following genes: adenosine deaminase, p53, beta-globin,
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC various syndromes. The present sequence is one of the gene correcting
CC oligonucleotides of the invention
XX
SQ Sequence 121 BP; 38 A; 23 C; 23 G; 37 T; 0 U; 0 Other;

Query Match 0.8%; Score 22; DB 1; Length 121;
Best Local Similarity 53.5%; Pred. No. 32;
Matches 46; Conservative 0; Mismatches 40; Indels 0; Gaps 0;

Qy 2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663

```
Db         36 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 95

Qy       2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
              ||||||  || || ||| ||  ||
Db         96 AATTGGCACGTAAACTGCTTAGAATG 121
```

RESULT 73
ABA79638/c
ID ABA79638 standard; DNA; 121 BP.
XX
AC ABA79638;
XX
DT 24-JAN-2002 (first entry)
XX
DE Factor IX mutation correcting oligonucleotide SEQ ID NO: 2484.
XX
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW antilipemic; ss.
XX
OS Homo sapiens.
XX
PN WO200173002-A2.
XX
PD 04-OCT-2001.
XX
PF 27-MAR-2001; 2001WO-US009761.
XX
PR 27-MAR-2000; 2000US-0192176P.
PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Gamper HB, Rice MC;
XX
DR WPI; 2001-639230/73.
XX
PT Oligonucleotide for targeted alterations of genetic sequences and for
PT treating cystic fibrosis, comprises at least one mismatch and chemical
PT modification.
XX
PS Claim 7; Page 185; 294pp; English.
XX
CC The present invention provides single-stranded oligonucleotides which can
CC be used for the targeted alteration of genomic sequences, where the
CC oligonucleotide has at least one mismatch compared with the genomic
CC sequence to be altered. In particular, these sequences are directed at
CC the following genes: adenosine deaminase, p53, beta-globin,
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC various syndromes. The present sequence is one of the gene correcting
CC oligonucleotides of the invention
XX
SQ Sequence 121 BP; 37 A; 23 C; 23 G; 38 T; 0 U; 0 Other;

Query Match 0.8%; Score 22; DB 1; Length 121;
Best Local Similarity 53.5%; Pred. No. 32;
Matches 46; Conservative 0; Mismatches 40; Indels 0; Gaps 0;

```
Qy       2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
              | |||  || | || ||    |    ||  ||   | |  |||  || |  |  |   |||
Db         86 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 27

Qy       2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
              ||||||  || || ||| ||  ||
Db         26 AATTGGCACGTAAACTGCTTAGAATG 1
```

RESULT 74
ABA79630/c
ID ABA79630 standard; DNA; 121 BP.
XX
AC ABA79630;
XX
DT 24-JAN-2002 (first entry)
XX
DE Factor IX mutation correcting oligonucleotide SEQ ID NO: 2476.
XX
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW antilipemic; ss.
XX
OS Homo sapiens.
XX
PN WO200173002-A2.
XX
PD 04-OCT-2001.
XX
PF 27-MAR-2001; 2001WO-US009761.
XX
PR 27-MAR-2000; 2000US-0192176P.
PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Gamper HB, Rice MC;
XX
DR WPI; 2001-639230/73.
XX
PT Oligonucleotide for targeted alterations of genetic sequences and for
PT treating cystic fibrosis, comprises at least one mismatch and chemical
PT modification.
XX
PS Claim 7; Page 184; 294pp; English.
XX
CC The present invention provides single-stranded oligonucleotides which can
CC be used for the targeted alteration of genomic sequences, where the
CC oligonucleotide has at least one mismatch compared with the genomic
CC sequence to be altered. In particular, these sequences are directed at
CC the following genes: adenosine deaminase, p53, beta-globin,
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC various syndromes. The present sequence is one of the gene correcting

CC oligonucleotides of the invention
XX
SQ Sequence 121 BP; 35 A; 23 C; 26 G; 37 T; 0 U; 0 Other;

Query Match 0.8%; Score 22; DB 1; Length 121;
Best Local Similarity 53.5%; Pred. No. 32;
Matches 46; Conservative 0; Mismatches 40; Indels 0; Gaps 0;

Qy 2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
Db 89 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 30

Qy 2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
Db 29 AATTGGCACGTAAACTGCTTAGAATG 4

RESULT 75
ABA79639
ID ABA79639 standard; DNA; 121 BP.
XX
AC ABA79639;
XX
DT 24-JAN-2002 (first entry)
XX
DE Factor IX mutation correcting oligonucleotide SEQ ID NO: 2485.
XX
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW antilipemic; ss.
XX
OS Homo sapiens.
XX
PN WO200173002-A2.
XX
PD 04-OCT-2001.
XX
PF 27-MAR-2001; 2001WO-US009761.
XX
PR 27-MAR-2000; 2000US-0192176P.
PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Gamper HB, Rice MC;
XX
DR WPI; 2001-639230/73.
XX
PT Oligonucleotide for targeted alterations of genetic sequences and for
PT treating cystic fibrosis, comprises at least one mismatch and chemical
PT modification.
XX
PS Claim 7; Page 185; 294pp; English.
XX
CC The present invention provides single-stranded oligonucleotides which can
CC be used for the targeted alteration of genomic sequences, where the
CC oligonucleotide has at least one mismatch compared with the genomic
CC sequence to be altered. In particular, these sequences are directed at
CC the following genes: adenosine deaminase, p53, beta-globin,
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC various syndromes. The present sequence is one of the gene correcting
CC oligonucleotides of the invention
XX
SQ Sequence 121 BP; 38 A; 23 C; 23 G; 37 T; 0 U; 0 Other;

Query Match 0.8%; Score 22; DB 1; Length 121;
Best Local Similarity 53.5%; Pred. No. 32;
Matches 46; Conservative 0; Mismatches 40; Indels 0; Gaps 0;

Qy 2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
Db 36 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 95

Qy 2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
Db 96 AATTGGCACGTAAACTGCTTAGAATG 121

RESULT 76
ABA79619
ID ABA79619 standard; DNA; 121 BP.
XX
AC ABA79619;
XX
DT 24-JAN-2002 (first entry)
XX
DE Factor IX mutation correcting oligonucleotide SEQ ID NO: 2465.
XX
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW antilipemic; ss.
XX
OS Homo sapiens.
XX
PN WO200173002-A2.
XX
PD 04-OCT-2001.
XX
PF 27-MAR-2001; 2001WO-US009761.
XX
PR 27-MAR-2000; 2000US-0192176P.
PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Gamper HB, Rice MC;
XX
DR WPI; 2001-639230/73.
XX
PT Oligonucleotide for targeted alterations of genetic sequences and for
PT treating cystic fibrosis, comprises at least one mismatch and chemical
PT modification.
XX
PS Claim 7; Page 184; 294pp; English.
XX
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CC be used for the targeted alteration of genomic sequences, where the
CC oligonucleotide has at least one mismatch compared with the genomic
CC sequence to be altered. In particular, these sequences are directed at
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CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC various syndromes. The present sequence is one of the gene correcting
CC oligonucleotides of the invention
XX
SQ Sequence 121 BP; 36 A; 25 C; 25 G; 35 T; 0 U; 0 Other;

Query Match 0.8%; Score 22; DB 1; Length 121;
Best Local Similarity 53.5%; Pred. No. 32;
Matches 46; Conservative 0; Mismatches 40; Indels 0; Gaps 0;

Qy 2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
Db 31 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 90

Qy 2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
Db 91 AATTGGCACGTAAACTGCTTAGAATG 116

RESULT 77
ABA79618/c
ID ABA79618 standard; DNA; 121 BP.
XX
AC ABA79618;
XX
DT 24-JAN-2002 (first entry)
XX
DE Factor IX mutation correcting oligonucleotide SEQ ID NO: 2464.
XX
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW antilipemic; ss.
XX
OS Homo sapiens.
XX
PN WO200173002-A2.
XX
PD 04-OCT-2001.
XX
PF 27-MAR-2001; 2001WO-US009761.
XX
PR 27-MAR-2000; 2000US-0192176P.
PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Gamper HB, Rice MC;
XX
DR WPI; 2001-639230/73.
XX
PT Oligonucleotide for targeted alterations of genetic sequences and for
PT treating cystic fibrosis, comprises at least one mismatch and chemical
PT modification.
XX
PS Claim 7; Page 184; 294pp; English.
XX
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CC sequence to be altered. In particular, these sequences are directed at
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CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC various syndromes. The present sequence is one of the gene correcting
CC oligonucleotides of the invention
XX
SQ Sequence 121 BP; 35 A; 25 C; 25 G; 36 T; 0 U; 0 Other;

Query Match 0.8%; Score 22; DB 1; Length 121;
Best Local Similarity 53.5%; Pred. No. 32;
Matches 46; Conservative 0; Mismatches 40; Indels 0; Gaps 0;

Qy 2604 CTATTGTAATAGGGTTTTAGCAGGGACATATTGTCCTGGTTGTTATTGTCTGTGTTTTTG 2663
Db 91 CCATTTAAACATGGATTGGACTCACACTGATCTCCATCTTTGAGATAGGTTAAGAAATTG 32

Qy 2664 CTTTGGCATATAGACGGCTGAGTTTG 2689
Db 31 AATTGGCACGTAAACTGCTTAGAATG 6

RESULT 78
AAC04575/c
ID AAC04575 standard; cDNA; 385 BP.
XX
AC AAC04575;
XX
DT 06-OCT-2000 (first entry)
XX
DE Human secreted protein 5' EST, SEQ ID NO: 8650.
XX
KW Human; 5' EST; expressed sequence tag; secreted protein; cDNA isolation;
KW gene therapy; chromosome mapping; ss.
XX
OS Homo sapiens.
XX
PN EP1033401-A2.
XX
PD 06-SEP-2000.
XX
PF 21-FEB-2000; 2000EP-00200610.
XX
PR 26-FEB-1999; 99US-0122487P.
XX
PA (GEST) GENSET.
XX
PI Dumas Milne Edwards J, Duclert A, Giordano J;
XX
DR WPI; 2000-500381/45.
XX
PT New nucleic acid that is a 5' expressed sequence tag (5' EST) for
PT obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and for
PT diagnostic, forensic, gene therapy and chromosome mapping procedures.
XX
PS Claim 1; SEQ ID NO 8650; 71pp + Sequence Listing; English.
XX
CC The present sequence is one of a large number of 5' ESTs derived from
CC mRNAs encoding secreted proteins. No ORF has yet been conclusively
CC identified within the present sequence. The 5' ESTs were prepared from
CC total human RNAs or polyA+ RNAs derived from 30 different tissues. EST
CC sequences usually correspond mainly to the 3' untranslated region (UTR)
CC of the mRNA because they are often obtained from oligo-dT primed cDNA

CC libraries. Such ESTs are not well suited for isolating cDNA sequences
CC derived from the 5' ends of mRNAs and even in those cases where longer
CC cDNA sequences have been obtained, the full 5' UTR is rarely included. 5'
CC ESTs are derived from mRNAs with intact 5' ends and can therefore be used
CC to obtain full length cDNAs and genomic DNAs. 5' ESTs are also used in
CC diagnostic, forensic, gene therapy and chromosome mapping procedures.
CC They are used to obtain upstream regulatory sequences and to design
CC expression and secretion vectors
XX
SQ Sequence 385 BP; 69 A; 105 C; 126 G; 80 T; 0 U; 5 Other;

Query Match 0.8%; Score 22; DB 1; Length 385;
Best Local Similarity 57.1%; Pred. No. 47;
Matches 40; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

Qy 653 TCTCTCTCTCCCTTTCTCTAACACTTCTGGGCCAGGGTAGGGGCACTACCGCATTCCCTC 712
Db 135 TCTCACACTCCCAGCCTCCCACAATCCGAGACTGGATGAGGGGCACGGCACCAGTGCACC 76

Qy 713 TCTCTTCCAA 722
Db 75 CCACAGACAA 66

RESULT 79
ABQ47969/c
ID ABQ47969 standard; DNA; 612 BP.
XX
AC ABQ47969;
XX
DT 12-JUL-2002 (first entry)
XX
DE Oligonucleotide for detecting cytosine methylation SEQ ID NO 34560.
XX
KW Human; cytosine methylation; 5'-CpG-3'; uracil; cytosine; diagnosis;
KW drug; side effect; cancer; central nervous system; cardiovascular;
KW gastrointestinal; respiratory system; single nucleotide polymorphism;
KW SNP; cell differentiation; ds.
XX
OS Homo sapiens.
XX
PN WO200218632-A2.
XX
PD 07-MAR-2002.
XX
PF 01-SEP-2001; 2001WO-EP010074.
XX
PR 01-SEP-2000; 2000DE-01043826.
PR 05-SEP-2000; 2000DE-01044543.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K, Guetig D;
XX
DR WPI; 2002-371829/40.
XX
PT Determining the degree of cytosine methylation in genomic DNA, useful for
PT diagnosis and prognosis, comprises selective hybridization of amplicons
PT from chemically treated DNA.
XX
PS Claim 12; 56pp + Sequence Listing; 56pp; German.
XX
CC This invention describes a novel method for determining the degree of
CC methylation of a particular cytosine in a motif 5'-CpG-3', present in a
CC genomic sample of DNA. The sample is treated chemically to convert
CC cytosine (C) but not methylated C, to uracil, then part of the genomic
CC DNA that contains the target C is amplified to form a labeled amplicon.
CC The amplicon is hybridised to two classes, each with at least one member,
CC of oligonucleotides and/or peptide-nucleic acid (PNA) oligomers and the
CC degree of hybridisation to both classes is determined from the label on
CC the amplicon. From the ratio of labels hybridised to the two classes of
CC oligomers, the degree of methylation is calculated. The method is used:
CC (i) for diagnosis and/or prognosis of side effects of therapeutic drugs
CC and of a wide range of diseases, e.g. cancer, disorders of the central
CC nervous, cardiovascular, gastrointestinal and respiratory systems etc.,
CC particularly by detecting mutations or single nucleotide polymorphisms
CC (SNP's); and (ii) for differentiation of cell or tissue types and for
CC investigating cell differentiation. The method allows the methylation
CC status of many C residues to be determined simultaneously. ABQ13410-
CC ABQ54121 represent genomic DNA sequences used to illustrate the method
CC for determining the degree of cytosine methylation described in the
CC disclosure of the invention
XX
SQ Sequence 612 BP; 232 A; 219 C; 72 G; 89 T; 0 U; 0 Other;

Query Match 0.8%; Score 22; DB 1; Length 612;
Best Local Similarity 49.2%; Pred. No. 54;
Matches 58; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

Qy 1503 TTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTGTGTGTGTGT 1562
Db 258 TTTCGAAGGAGTATTGTTTTTTTTTGTATTTTTTTTTTAGGGAGTTCGGTCGTAGTTTTT 199

Qy 1563 GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTCTGTGT 1620
Db 198 TTAGGAACGCGTTGGCGCGTCGGCGTCGGTGTAGGACGTCGTGGGTTTTTTTTTGGGT 141

RESULT 80
ABQ47968
ID ABQ47968 standard; DNA; 612 BP.
XX
AC ABQ47968;
XX
DT 12-JUL-2002 (first entry)
XX
DE Oligonucleotide for detecting cytosine methylation SEQ ID NO 34559.
XX
KW Human; cytosine methylation; 5'-CpG-3'; uracil; cytosine; diagnosis;
KW drug; side effect; cancer; central nervous system; cardiovascular;
KW gastrointestinal; respiratory system; single nucleotide polymorphism;
KW SNP; cell differentiation; ds.
XX
OS Homo sapiens.
XX
PN WO200218632-A2.
XX
PD 07-MAR-2002.
XX
PF 01-SEP-2001; 2001WO-EP010074.
XX
PR 01-SEP-2000; 2000DE-01043826.
PR 05-SEP-2000; 2000DE-01044543.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K, Guetig D;
XX
DR WPI; 2002-371829/40.
XX
PT Determining the degree of cytosine methylation in genomic DNA, useful for
PT diagnosis and prognosis, comprises selective hybridization of amplicons
PT from chemically treated DNA.
XX
PS Claim 12; 56pp + Sequence Listing; 56pp; German.
XX
CC This invention describes a novel method for determining the degree of
CC methylation of a particular cytosine in a motif 5'-CpG-3', present in a
CC genomic sample of DNA. The sample is treated chemically to convert
CC cytosine (C) but not methylated C, to uracil, then part of the genomic
CC DNA that contains the target C is amplified to form a labeled amplicon.
CC The amplicon is hybridised to two classes, each with at least one member,
CC of oligonucleotides and/or peptide-nucleic acid (PNA) oligomers and the
CC degree of hybridisation to both classes is determined from the label on
CC the amplicon. From the ratio of labels hybridised to the two classes of
CC oligomers, the degree of methylation is calculated. The method is used:

CC (i) for diagnosis and/or prognosis of side effects of therapeutic drugs
CC and of a wide range of diseases, e.g. cancer, disorders of the central
CC nervous, cardiovascular, gastrointestinal and respiratory systems etc.,
CC particularly by detecting mutations or single nucleotide polymorphisms
CC (SNP's); and (ii) for differentiation of cell or tissue types and for
CC investigating cell differentiation. The method allows the methylation
CC status of many C residues to be determined simultaneously. ABQ13410-
CC ABQ54121 represent genomic DNA sequences used to illustrate the method
CC for determining the degree of cytosine methylation described in the
CC disclosure of the invention
XX
SQ Sequence 612 BP; 89 A; 72 C; 219 G; 232 T; 0 U; 0 Other;

Query Match 0.8%; Score 22; DB 1; Length 612;
Best Local Similarity 49.2%; Pred. No. 54;
Matches 58; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

Qy 1503 TTATCAATGAGCAGTGTTTGTGGATTCTTGTTATCTTGCACTTGTGAAGTGTGTGTGTGT 1562
Db 355 TTTCGAAGGAGTATTGTTTTTTTTTGTATTTTTTTTTTAGGGAGTTCGGTCGTAGTTTTT 414

Qy 1563 GTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTCTGTGT 1620
Db 415 TTAGGAACGCGTTGGCGCGTCGGCGTCGGTGTAGGACGTCGTGGGTTTTTTTTTGGGT 472

RESULT 81
AAC70944/c
ID AAC70944 standard; DNA; 253 BP.
XX
AC AAC70944;
XX
DT 09-FEB-2001 (first entry)
XX
DE Single nucleotide polymorphism containing sequence #258.
XX
KW Single nucleotide polymorphism; SNP; human; genetic disease;
KW disease susceptibility; cardiovascular system; endocrine system;
KW neurological system; forensic testing; paternity testing; ds.
XX
OS Homo sapiens.
XX
PN WO200058519-A2.
XX
PD 05-OCT-2000.
XX
PF 30-MAR-2000; 2000WO-US008440.
XX
PR 31-MAR-1999; 99US-0127248P.
XX
PA (WHED) WHITEHEAD INST BIOMEDICAL RES.
PA (AFFY-) AFFYMETRIX INC.
XX
PI Altshuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;
PI Lipshutz RJ, Patil N, Sklar P;
XX
DR WPI; 2000-611722/58.
XX
PT Nucleic acid selected from one of 106 genes comprising single nucleotide
PT polymorphisms, allele-specific oligonucleotides to the genes are useful
PT for phenotypic correlations, forensics, paternity testing, medicine and
PT genetic analysis.
XX
PS Claim 1; Fig 5; 214pp; English.
XX
CC The present invention is concerned with a number of human single
CC nucleotide polymorphisms (SNPs) which the inventors identified in human
CC genes. These SNPs can be used in disease diagnosis and prediction of an
CC individual's susceptibility to disease, in forensic and paternity testing
CC and in genetic mapping. In particular, the SNPs of the invention can be
CC used to diagnose susceptibility to diseases of the cardiovascular,
CC endocrine and neurological systems, such as coronary artery disease,
CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
CC diseases. Note: The degenerate codon within the sequence represents the
CC position of an SNP, for example the letter S represents a polymorphism
CC where the nucleotide may be C or G
XX
SQ Sequence 253 BP; 92 A; 41 C; 58 G; 61 T; 0 U; 1 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 253;
Best Local Similarity 53.6%; Pred. No. 53;
Matches 45; Conservative 0; Mismatches 39; Indels 0; Gaps 0;

Qy 2077 TTTTGTATGCTTCTTGTACCTTGATAGGCATCTCTTTCTCAAGGTTAGGAAATTTTTCTT 2136
Db 141 TATGGGTTATTTTATGTCCTCTGTATCTCTTCTGGCACTCTTCGTTGGTCACTAAGGGTA 82

Qy 2137 TTTTGGTTTTCTTGAAAATATTTT 2160
Db 81 TCTTGGCTTTCTGGAGAGTATTTT 58

RESULT 82
ABV98470/c
ID ABV98470 standard; cDNA; 254 BP.
XX
AC ABV98470;
XX
DT 14-JAN-2003 (first entry)
XX
DE Human pancreatic cancer expressed cDNA SEQ ID NO 3878.
XX
KW Human; pancreas; cancer; gene therapy; vaccine; immunostimulant;
KW cytostatic; tumour; gene; ss.
XX
OS Homo sapiens.
XX
PN WO200260317-A2.
XX
PD 08-AUG-2002.
XX
PF 30-JAN-2002; 2002WO-US002781.
XX
PR 30-JAN-2001; 2001US-0265305P.
PR 31-JAN-2001; 2001US-0265682P.
PR 09-FEB-2001; 2001US-0267568P.
PR 21-MAR-2001; 2001US-0278651P.
PR 28-APR-2001; 2001US-0287112P.
PR 16-MAY-2001; 2001US-0291631P.
PR 12-JUL-2001; 2001US-0305484P.
PR 20-AUG-2001; 2001US-0313999P.
PR 27-NOV-2001; 2001US-0333626P.
XX
PA (CORI-) CORIXA CORP.
XX
PI Benson DR, Kalos MD, Lodes MJ, Persing DH, Hepler WT, Jiang Y;
XX
DR WPI; 2002-627435/67.
XX
PT New isolated polynucleotide and pancreatic tumor polypeptides, useful for
PT diagnosing, preventing and/or treating cancer, particularly pancreatic
PT cancer.
XX
PS Claim 1; SEQ ID NO 3878; 300pp + Sequence Listing; English.
XX
CC The invention relates to an isolated polynucleotide (I) comprising: (a)
CC any of a group of over 4000 nucleotide sequences (ABV94628-ABV99145); (b)
CC complements of (a); (c) sequences consisting of at least 20 contiguous
CC residues of (a); (d) sequences that hybridize to (a), under moderately
CC stringent conditions; (e) sequences having at least 75% or 90% identity
CC to (a); or (f) degenerate variants of (a). Polypeptides (ABP68596-
CC ABP68637) encoded by (I) and oligonucleotide can be used to detect cancer
CC in a patient and compositions comprising polypeptides, polynucleotides,
CC antibodies, fusion proteins, T cell populations and antigen presenting
CC cells expressing the polypeptide are useful in treating pancreatic cancer
CC and stimulating an immune response. The polynucleotides can be used as

CC probes or primers for nucleic acid hybridisation, in the design and
CC preparation of ribozyme molecules for inhibiting expression of the tumour
CC polypeptides and proteins in the tumour cells, in vaccines and for gene
CC therapy. Note: The sequence data for this patent did not form part of the
CC printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 254 BP; 61 A; 74 C; 84 G; 35 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 254;
Best Local Similarity 47.7%; Pred. No. 53;
Matches 63; Conservative 0; Mismatches 69; Indels 0; Gaps 0;

```
Qy       2284 TCCATTTCTTCTATCTTGTCTTCACTGCCTGAGATTCTCTCTTCTATCTCTTGTATTCTG 2343
             ||  || | ||   |||||   |  ||||| ||  | |  |     |  ||       ||
Db        247 TCAGTTCCCTCCTCCTTGTGGCCGTTGCCTCAGGCTATGGCCCACCTTCCTCTCGCCCTT 188

Qy       2344 TCAGTGAGGCTTGTCTCTGAGGTTCCTGTTGGGTTCTTAATTTTTTCATTTCCAGATTTC 2403
              |||   |  |||||  ||  |   ||  |   ||  | |  | |  |  | || |
Db        187 CCAGGCCGCGTTGTCAATGGTGAGGATGCGGTCCCCTACAGCTGGCCCTGGCAGGTTTCC 128

Qy       2404 CTTCAGTTTGGG 2415
              || |||| || |
Db        127 CTGCAGTATGAG 116
```

RESULT 83
ABA94394/c
ID ABA94394 standard; cDNA; 786 BP.
XX
AC ABA94394;
XX
DT 26-MAR-2002 (first entry)
XX
DE Human prostasin-like serine protease encoding cDNA.
XX
KW Prostasin-like enzyme; human; prostasin-like serine protease; cytostatic;
KW antiatherosclerotic; virucide; osteopathic; antiinflammatory; vasotropic;
KW neuroprotective; gene therapy; antisense therapy; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT CDS 1. .786
FT /*tag= a
FT /product= "prostasin-like serine protease"
XX
PN WO200198466-A2.
XX
PD 27-DEC-2001.
XX
PF 22-JUN-2001; 2001WO-EP007116.
XX
PR 23-JUN-2000; 2000US-0213474P.
PR 22-MAR-2001; 2001US-0277612P.
XX
PA (FARB) BAYER AG.
XX
PI Xiao Y;
XX
DR WPI; 2002-114575/15.
DR P-PSDB; ABB07284.
XX
PT Novel human prostasin-like enzyme polypeptide and polynucleotide which
PT can be regulated for treating metastasis of malignant cells,
PT inflammation, atherosclerosis, neurodegenerative disease and pathogenic
PT infection.
XX
PS Claim 1; Fig 1; 125pp; English.
XX
CC The invention relates to human prostasin-like enzyme polypeptides and
CC polynucleotides. The enzyme can be expressed by standard recombinant
CC methodology. The polypeptide, polynucleotide and modulators are useful
CC for treating diseases like metastasis of malignant cells, tumour
CC angiogenesis, inflammation, chronic obstructive pulmonary disease (COPD),
CC atherosclerosis, neurodegenerative disease and pathogenic infection,
CC particularly viral infection. The prostasin-like enzyme gene provides a
CC therapeutic target of decreasing the enzyme activity, in particular for
CC treating or preventing metastatic cancer. Neurodegenerative diseases
CC include for e.g. prion protein amyloid plaques of Genstmann-Straussler
CC Syndrome, Creutzfeldt-Jakob disease and Scrapie. The agonists and
CC antagonists of the polypeptide may be useful to treat osteoporosis,
CC Paget's disease, degradation of bone implants particularly dental
CC implants. Altered levels of human prostasin-like enzyme activity inhibit
CC both smooth muscle cell proliferation and lipid accumulation and inhibit
CC the progression of restenosis and atherosclerosis. Anti-human prostasin-
CC like serine protease antibodies are useful for immunodetection and
CC diagnosis of micrometastases, autoimmune lesions and renal failure in
CC biopsy specimens, plasma samples and body fluids. The present sequence
CC represents a cDNA encoding a human prostasin-like serine protease
XX
SQ Sequence 786 BP; 95 A; 274 C; 286 G; 131 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 786;
Best Local Similarity 53.6%; Pred. No. 76;
Matches 45; Conservative 0; Mismatches 39; Indels 0; Gaps 0;

```
Qy        361 CAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGGCA 420
              |||  ||| |  | ||||||  | |    ||  ||  ||| |  | ||  |||| |
Db        683 CAGCTCCCAGACTGCAGGCAGGTCAGAGGTCCCCCAGAATCACCCTGGCAGGCGTCCTTG 624

Qy        421 GGGCCATGGCTCTGGTGATCACTC 444
               |||| |||   | |    ||| |
Db        623 TGGCCCTGGGGGTAGCCGGCACAC 600
```

RESULT 84
ABQ86175/c
ID ABQ86175 standard; DNA; 843 BP.
XX
AC ABQ86175;
XX
DT 10-SEP-2002 (first entry)
XX
DE Novel human gene. SEQ ID 46.
XX
KW Human; cytostatic; vulnerary; antiarteriosclerotic; antiparkinsonian;
KW nootropic; neuroprotective; immunosuppressive; haemostatic;
KW antiinflammatory; cardiant; antiulcer; virucide; antithyroid;
KW cerebroprotective; anorectic; metabolic; vaccine; cancer; infection;
KW wound healing disorders; atherosclerosis; Parkinson's disease;
KW Alzheimer's disease; autoimmune disorder; haematopoietic disorder;
KW inflammation; neoplastic disease; nervous system disorder;
KW cardiovascular disorders; pancreatitis; respiratory disorder;
KW hyperproliferation; systemic autoimmune disease; hyper-immunity;
KW developmental abnormality; gastrointestinal ulceration; neuropathy;
KW haematological disease; metabolic disease; sperm dysfunction;
KW thyroid disorder; hypothyroidism; brain damage; colitis;
KW cone photo- transduction deficiency; neurological disease; stroke;
KW angiogenesis; ovulation disorder; spinal cord; thyroid gland; heart;
KW trachea; thymus; lymph node; muscular system; obesity; anorexia;
KW growth abnormality; precocious puberty; gene; ss.
XX
OS Homo sapiens.
XX
PN WO200250105-A1.
XX
PD 27-JUN-2002.
XX
PF 17-DEC-2001; 2001WO-US049232.
XX
PR 19-DEC-2000; 2000US-0256710P.
PR 20-DEC-2000; 2000US-0257048P.
PR 09-JAN-2001; 2001US-0260482P.
PR 30-JAN-2001; 2001US-0264922P.
PR 06-FEB-2001; 2001US-0266797P.

PR 19-MAR-2001; 2001US-0276988P.
PR 04-APR-2001; 2001US-0281535P.
PR 08-MAY-2001; 2001US-0289622P.
XX
PA (SMIK) SMITHKLINE BEECHAM CORP.
PA (SMIK) SMITHKLINE BEECHAM PLC.
PA (GLAX) GLAXO GROUP LTD.
XX
PI Agarwal P, Birkeland M, Cogswell JP, Kabnick KF, Lai Y;
PI Martensen SA, Rizvi SK, Smith RF, Strum JC, Xie Q;
XX
DR WPI; 2002-508784/54.
DR P-PSDB; ABP61010.
XX
PT Secreted proteins and polynucleotides useful as vaccines for preventing
PT or treating various diseases e.g. cancer, wounds, atherosclerosis,
PT Parkinson's disease, Alzheimer's disease, infection, autoimmune disorder.
XX
PS Claim 2(a); Page 254; 335pp; English.
XX
CC The invention relates to an isolated polypeptide with signal sequences
CC which allow it to be secreted extracellularly or membrane associated. The
CC activity of polypeptides of the invention may be described as,
CC cytostatic, vulnerary, antiarteriosclerotic, antiparkinsonian, nootropic,
CC neuroprotective, immunosuppressive, haemostatic, antiinflammatory,
CC cardiant, antiulcer, virucide, antithyroid, cerebroprotective, anorectic,
CC and metabolic. Polypeptides and polynucleotides of the invention are
CC useful in the treatment, or as a vaccine in the prevention of, cancer,
CC wound healing disorders, infection, atherosclerosis, Parkinson's disease
CC and Alzheimer's disease, autoimmune disorder, haematopoietic disorder,
CC inflammation, neoplastic diseases, nervous system related disorders and
CC cardiovascular disorders, pancreatitis, respiratory disorder,
CC hyperproliferation, systemic autoimmune disease, hyper-immunity,
CC developmental abnormality, gastrointestinal ulceration, neuropathy,
CC haematological diseases, metabolic diseases, sperm dysfunction, thyroid
CC disorders e.g. hypothyroidism, brain damages, colitis, cone photo-
CC transduction deficiency, neurological diseases, stroke, angiogenesis,
CC ovulation disorders, diseases in the spinal cord, thyroid gland, heart,
CC trachea, thymus, lymph node and muscular system, obesity, anorexia,
CC growth abnormalities, and alleviation of precocious puberty. The
CC sequences given in records ABQ86130-ABQ86184 represent novel human cDNA's
CC of the invention
XX
SQ Sequence 843 BP; 107 A; 290 C; 304 G; 142 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 843;
Best Local Similarity 53.6%; Pred. No. 77;
Matches 45; Conservative 0; Mismatches 39; Indels 0; Gaps 0;

```
Qy        361 CAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGGCA 420
              |||  ||| |  | ||||||| | |   ||  ||  ||| |  | ||  |||| |
Db        728 CAGCTCCCAGACTGCAGGCAGGTCAGAGGTCCCCCAGAATCACCCTGGCAGGCGTCCTTG 669

Qy        421 GGGCCATGGCTCTGGTGATCACTC 444
              |||| |||   | |    ||| |
Db        668 TGGCCCTGGGGGTAGCCGGCACAC 645
```

RESULT 85
ABQ86176/c
ID ABQ86176 standard; DNA; 849 BP.
XX
AC ABQ86176;
XX
DT 10-SEP-2002 (first entry)
XX
DE Novel human gene. SEQ ID 47.
XX
KW Human; cytostatic; vulnerary; antiarteriosclerotic; antiparkinsonian;
KW nootropic; neuroprotective; immunosuppressive; haemostatic;
KW antiinflammatory; cardiant; antiulcer; virucide; antithyroid;
KW cerebroprotective; anorectic; metabolic; vaccine; cancer; infection;
KW wound healing disorders; atherosclerosis; Parkinson's disease;
KW Alzheimer's disease; autoimmune disorder; haematopoietic disorder;
KW inflammation; neoplastic disease; nervous system disorder;
KW cardiovascular disorders; pancreatitis; respiratory disorder;
KW hyperproliferation; systemic autoimmune disease; hyper-immunity;
KW developmental abnormality; gastrointestinal ulceration; neuropathy;
KW haematological disease; metabolic disease; sperm dysfunction;
KW thyroid disorder; hypothyroidism; brain damage; colitis;
KW cone photo- transduction deficiency; neurological disease; stroke;
KW angiogenesis; ovulation disorder; spinal cord; thyroid gland; heart;
KW trachea; thymus; lymph node; muscular system; obesity; anorexia;
KW growth abnormality; precocious puberty; gene; ss.
XX
OS Homo sapiens.
XX
PN WO200250105-A1.
XX
PD 27-JUN-2002.
XX
PF 17-DEC-2001; 2001WO-US049232.
XX
PR 19-DEC-2000; 2000US-0256710P.
PR 20-DEC-2000; 2000US-0257048P.
PR 09-JAN-2001; 2001US-0260482P.
PR 30-JAN-2001; 2001US-0264922P.
PR 06-FEB-2001; 2001US-0266797P.
PR 19-MAR-2001; 2001US-0276988P.
PR 04-APR-2001; 2001US-0281535P.
PR 08-MAY-2001; 2001US-0289622P.
XX
PA (SMIK) SMITHKLINE BEECHAM CORP.
PA (SMIK) SMITHKLINE BEECHAM PLC.
PA (GLAX) GLAXO GROUP LTD.
XX
PI Agarwal P, Birkeland M, Cogswell JP, Kabnick KF, Lai Y;
PI Martensen SA, Rizvi SK, Smith RF, Strum JC, Xie Q;
XX
DR WPI; 2002-508784/54.
DR P-PSDB; ABP61011.
XX
PT Secreted proteins and polynucleotides useful as vaccines for preventing
PT or treating various diseases e.g. cancer, wounds, atherosclerosis,
PT Parkinson's disease, Alzheimer's disease, infection, autoimmune disorder.
XX
PS Claim 2(a); Page 255; 335pp; English.
XX
CC The invention relates to an isolated polypeptide with signal sequences
CC which allow it to be secreted extracellularly or membrane associated. The
CC activity of polypeptides of the invention may be described as,
CC cytostatic, vulnerary, antiarteriosclerotic, antiparkinsonian, nootropic,
CC neuroprotective, immunosuppressive, haemostatic, antiinflammatory,
CC cardiant, antiulcer, virucide, antithyroid, cerebroprotective, anorectic,
CC and metabolic. Polypeptides and polynucleotides of the invention are
CC useful in the treatment, or as a vaccine in the prevention of, cancer,
CC wound healing disorders, infection, atherosclerosis, Parkinson's disease
CC and Alzheimer's disease, autoimmune disorder, haematopoietic disorder,
CC inflammation, neoplastic diseases, nervous system related disorders and
CC cardiovascular disorders, pancreatitis, respiratory disorder,
CC hyperproliferation, systemic autoimmune disease, hyper-immunity,
CC developmental abnormality, gastrointestinal ulceration, neuropathy,
CC haematological diseases, metabolic diseases, sperm dysfunction, thyroid
CC disorders e.g. hypothyroidism, brain damages, colitis, cone photo-
CC transduction deficiency, neurological diseases, stroke, angiogenesis,
CC ovulation disorders, diseases in the spinal cord, thyroid gland, heart,
CC trachea, thymus, lymph node and muscular system, obesity, anorexia,
CC growth abnormalities, and alleviation of precocious puberty. The
CC sequences given in records ABQ86130-ABQ86184 represent novel human cDNA's
CC of the invention
XX
SQ Sequence 849 BP; 104 A; 302 C; 296 G; 147 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 849;
Best Local Similarity 53.6%; Pred. No. 77;
Matches 45; Conservative 0; Mismatches 39; Indels 0; Gaps 0;

```
Qy        361 CAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGGCA 420
              |||  ||| |  | |||||| | |    ||  ||  ||| |  | ||  |||| |
Db        734 CAGCTCCCAGACTGCAGGCAGGTCAGAGGTCCCCCAGAATCACCCTGGCAGGCGTCCTTG 675

Qy        421 GGGCCATGGCTCTGGTGATCACTC 444
              |||| |||   | |    ||| |
Db        674 TGGCCCTGGGGGTAGCCGGCACAC 651


RESULT 86
ABA94396/c
ID   ABA94396 standard; cDNA; 944 BP.
XX
AC   ABA94396;
XX
DT   26-MAR-2002  (first entry)
XX
DE   Human prostasin-like serine protease encoding cDNA.
XX
KW   Prostasin-like enzyme; human; prostasin-like serine protease; cytostatic;
KW   antiatherosclerotic; virucide; osteopathic; antiinflammatory; vasotropic;
KW   neuroprotective; gene therapy; antisense therapy; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             1. .819
FT                   /*tag=  a
FT                   /product= "prostasin-like serine protease"
XX
PN   WO200198466-A2.
XX
PD   27-DEC-2001.
XX
PF   22-JUN-2001; 2001WO-EP007116.
XX
PR   23-JUN-2000; 2000US-0213474P.
PR   22-MAR-2001; 2001US-0277612P.
XX
PA   (FARB ) BAYER AG.
XX
PI   Xiao Y;
XX
DR   WPI; 2002-114575/15.
DR   P-PSDB; ABB07286.
XX
PT   Novel human prostasin-like enzyme polypeptide and polynucleotide which
PT   can be regulated for treating metastasis of malignant cells,
PT   inflammation, atherosclerosis, neurodegenerative disease and pathogenic
PT   infection.
XX
PS   Claim 1; Fig 5; 125pp; English.
XX
CC   The invention relates to human prostasin-like enzyme polypeptides and
CC   polynucleotides. The enzyme can be expressed by standard recombinant
CC   methodology. The polypeptide, polynucleotide and modulators are useful
CC   for treating diseases like metastasis of malignant cells, tumour
CC   angiogenesis, inflammation, chronic obstructive pulmonary disease (COPD),
CC   atherosclerosis, neurodegenerative disease and pathogenic infection,
CC   particularly viral infection. The prostasin-like enzyme gene provides a
CC   therapeutic target of decreasing the enzyme activity, in particular for
CC   treating or preventing metastatic cancer. Neurodegenerative diseases
CC   include for e.g. prion protein amyloid plaques of Genstmann-Straussler
CC   Syndrome, Creutzfeldt-Jakob disease and Scrapie. The agonists and
CC   antagonists of the polypeptide may be useful to treat osteoporosis,
CC   Paget's disease, degradation of bone implants particularly dental
CC   implants. Altered levels of human prostasin-like enzyme activity inhibit
CC   both smooth muscle cell proliferation and lipid accumulation and inhibit
CC   the progression of restenosis and atherosclerosis. Anti-human prostasin-
CC   like serine protease antibodies are useful for immunodetection and
CC   diagnosis of micrometastases, autoimmune lesions and renal failure in
CC   biopsy specimens, plasma samples and body fluids. The present sequence
CC   represents a cDNA encoding a human prostasin-like serine protease
XX
SQ   Sequence 944 BP; 150 A; 318 C; 318 G; 158 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 21.6;  DB 1;  Length 944;
  Best Local Similarity   53.6%;  Pred. No. 80;
  Matches   45;  Conservative    0;  Mismatches   39;  Indels    0;  Gaps    0;

Qy        361 CAGTCCCCTGGGTACAGGCATGGCCATGGCTCCAGAGATTGCCTCTTCCAGGTGCAGGCA 420
              |||  ||| |  | |||||| | |    ||  ||  ||| |  | ||  |||| |
Db        695 CAGCTCCCAGACTGCAGGCAGGTCAGAGGTCCCCCAGAATCACCCTGGCAGGCGTCCTTG 636

Qy        421 GGGCCATGGCTCTGGTGATCACTC 444
              |||| |||   | |    ||| |
Db        635 TGGCCCTGGGGGTAGCCGGCACAC 612


RESULT 87
AAX87259/c
ID   AAX87259 standard; cDNA; 1378 BP.
XX
AC   AAX87259;
XX
DT   27-SEP-1999  (first entry)
XX
DE   cDNA clone encoding human PRO343, amplified in tumour cells.
XX
KW   PRO343; UNQ302; cancer; tumour; diagnosis; therapy; human; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             53. .1006
FT                   /*tag=  a
FT   sig_peptide     53. .148
FT                   /*tag=  b
FT   mat_peptide     149. .1003
FT                   /*tag=  c
XX
PN   WO9935170-A2.
XX
PD   15-JUL-1999.
XX
PF   05-JAN-1999;   99WO-US000106.
XX
PR   05-JAN-1998;   98US-0070440P.
PR   29-APR-1998;   98US-0083500P.
PR   22-MAY-1998;   98US-0086414P.
PR   10-JUN-1998;   98US-0088742P.
PR   10-NOV-1998;   98US-0107783P.
PR   20-NOV-1998;   98US-0109304P.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Botstein D,  Goddard A,  Gurney AL,  Hillan KJ,  Lawrence DA,  Roy MA;
PI   Wood WI;
XX
DR   WPI; 1999-430385/36.
DR   P-PSDB; AAY06482.
XX
PT   Antibody against proteins expressed in neoplastic cells, useful for tumor
PT   diagnosis and treatment.
XX
PS   Example 1; Fig 11; 162pp; English.
XX
CC   This is the nucleotide sequence of cDNA clone DNA43318 (ATCC 209481)
CC   coding for human PRO343 (UNQ302) (see AAY06482). The clone was isolated
CC   from a foetal lung library. Amplification of DNA43318 (chromosome 16) was
CC   observed in primary lung and primary colon tumours, suggesting an
CC   association with tumour formation or growth. Antagonists (e.g.
CC   antibodies) directed against PRO343 may have utility in cancer therapy.
CC   The invention identifies 14 genes (see AAX87254-67) that are amplified in
CC   the genome of tumour cells. Such amplification is expected to be
```

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CC   associated with overexpression of the gene product and to contribute to
CC   tumorigenesis. The encoded proteins (see AAY06477-90) may be useful
CC   targets for the diagnosis and/or treatment (including prevention) of
CC   certain cancers, and may act as predictors of the prognosis of tumour
CC   treatment
XX
SQ   Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 89;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   |  | | | | |  | || |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32


RESULT 88
AAX52262/c
ID   AAX52262 standard; DNA; 1378 BP.
XX
AC   AAX52262;
XX
DT   25-JUN-1999  (first entry)
XX
DE   Protein PRO343 cDNA clone DNA43318-1217.
XX
KW   Secreted protein; transmembrane protein; human; enterocolitis;
KW   Zollinger-Ellison syndrome; gastrointestinal ulceration;
KW   congenital microvillus atrophy; skin disease; cell growth;
KW   abnormal keratinocyte differentiation; psoriasis; epithelial cancer;
KW   Parkinson's disease; Alzheimer's disease; ALS; neuropathy; fibromodulin;
KW   dermal scarring; Usher Syndrome; Atrophia areata; anti-thrombotic;
KW   wound healing; tissue repair; ss.
XX
OS   Homo sapiens.
XX
PN   WO9914328-A2.
XX
PD   25-MAR-1999.
XX
PF   16-SEP-1998;   98WO-US019330.
XX
PR   17-SEP-1997;   97US-0059113P.
PR   17-SEP-1997;   97US-0059115P.
PR   17-SEP-1997;   97US-0059117P.
PR   17-SEP-1997;   97US-0059119P.
PR   17-SEP-1997;   97US-0059121P.
PR   17-SEP-1997;   97US-0059122P.
PR   17-SEP-1997;   97US-0059184P.
PR   18-SEP-1997;   97US-0059263P.
PR   18-SEP-1997;   97US-0059266P.
PR   15-OCT-1997;   97US-0062125P.
PR   17-OCT-1997;   97US-0062285P.
PR   17-OCT-1997;   97US-0062287P.
PR   21-OCT-1997;   97US-0063486P.
PR   24-OCT-1997;   97US-0062814P.
PR   24-OCT-1997;   97US-0062816P.
PR   24-OCT-1997;   97US-0063045P.
PR   24-OCT-1997;   97US-0063120P.
PR   24-OCT-1997;   97US-0063121P.
PR   24-OCT-1997;   97US-0063127P.
PR   24-OCT-1997;   97US-0063128P.
PR   27-OCT-1997;   97US-0063327P.
PR   27-OCT-1997;   97US-0063329P.
PR   28-OCT-1997;   97US-0063541P.
PR   28-OCT-1997;   97US-0063542P.
PR   28-OCT-1997;   97US-0063544P.
PR   28-OCT-1997;   97US-0063549P.
PR   28-OCT-1997;   97US-0063550P.
PR   28-OCT-1997;   97US-0063564P.
PR   29-OCT-1997;   97US-0063435P.
PR   29-OCT-1997;   97US-0063704P.
PR   29-OCT-1997;   97US-0063732P.
PR   29-OCT-1997;   97US-0063734P.
PR   29-OCT-1997;   97US-0063735P.
PR   29-OCT-1997;   97US-0063738P.
PR   29-OCT-1997;   97US-0064215P.
PR   31-OCT-1997;   97US-0063870P.
PR   31-OCT-1997;   97US-0064103P.
PR   03-NOV-1997;   97US-0064248P.
PR   07-NOV-1997;   97US-0064809P.
PR   12-NOV-1997;   97US-0065186P.
PR   17-NOV-1997;   97US-0065846P.
PR   18-NOV-1997;   97US-0065693P.
PR   21-NOV-1997;   97US-0066120P.
PR   21-NOV-1997;   97US-0066364P.
PR   24-NOV-1997;   97US-0066453P.
PR   24-NOV-1997;   97US-0066466P.
PR   24-NOV-1997;   97US-0066511P.
PR   24-NOV-1997;   97US-0066770P.
PR   24-NOV-1997;   97US-0066772P.
PR   25-NOV-1997;   97US-0066840P.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Wood WI,  Gurney AL,  Goddard A,  Pennica D,  Chen J,  Yuan J;
XX
DR   WPI; 1999-229533/19.
DR   P-PSDB; AAY13391.
XX
PT   New isolated human genes and polypeptides used in, e.g. treatment of
PT   gastrointestinal ulceration.
XX
PS   Claim 2; Fig 97; 320pp; English.
XX
CC   AAX52213-74 encode secreted and transmembrane human proteins, and are
CC   obtained from cDNA libraries, prepared from fetal lung, fetal kidney,
CC   fetal brain, fetal liver and fetal retina. The encoded polypeptides have
CC   specific uses based on their homology to known polypeptides, e.g. PRO211
CC   and PRO217 can be used for disorders associated with the preservation and
CC   maintenance of gastrointestinal mucosa and the repair of acute and
CC   chronic mucosal lesions (e.g. enterocolitis, Zollinger-Ellison syndrome,
CC   gastrointestinal ulceration and congenital microvillus atrophy), skin
CC   diseases associated with abnormal keratinocyte differentiation (e.g.
CC   psoriasis, epithelial cancers such as lung squamous cell carcinoma of the
CC   vulva and gliomas), potent effects on cell growth and development,
CC   diseases related to growth or survival of nerve cells including
CC   Parkinson's disease, Alzheimer's disease, ALS, neuropathies or cancer.
CC   PRO265 can be used as for fibromodulin, e.g. for reducing dermal
CC   scarring. PRO264 can be used as a target for anti-tumor drugs. PRO533 may
CC   be used in the treatment of Usher Syndrome or Atrophia areata; PRO269 can
CC   be used as an anti-thrombotic agent; PRO287 polypeptides and portions may
CC   have therapeutic applications in wound healing and tissue repair; PRO317
CC   can be used for treating problems of the kidney, uterus, endometrium,
CC   blood vessels, or related tissue, e.g. in the heart of genital tract
XX
SQ   Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 89;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   |  | | | | |  | || |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32
```

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RESULT 89
AAA46914/c
ID   AAA46914 standard; cDNA; 1378 BP.
XX
AC   AAA46914;
XX
DT   03-OCT-2000  (first entry)
XX
DE   cDNA encoding novel polypeptide PRO343.
XX
KW   PRO201; PRO292; PRO327; PRO1265; PRO344; PRO343; PRO347; PRO357; PRO715;
KW   PRO1017; PRO1112; PRO509; PRO853; PRO882; tumour cell; tumourigenesis;
KW   cancer; neoplastic cell growth; cell proliferation; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             53. .1007
FT                   /*tag=  a
XX
PN   WO200037640-A2.
XX
PD   29-JUN-2000.
XX
PF   16-DEC-1999;   99WO-US030095.
XX
PR   22-DEC-1998;   98US-0113296P.
PR   08-MAR-1999;   99WO-US005028.
PR   02-JUN-1999;   99WO-US012252.
PR   01-SEP-1999;   99WO-US020111.
PR   15-SEP-1999;   99WO-US021090.
PR   30-NOV-1999;   99WO-US028313.
PR   30-NOV-1999;   99WO-US028409.
PR   01-DEC-1999;   99WO-US028301.
PR   02-DEC-1999;   99WO-US028565.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Botstein D,  Goddard A,  Gurney AL,  Hillan K,  Lawrence DA,  Roy MA;
PI   Wood WI;
XX
DR   WPI; 2000-452188/39.
DR   P-PSDB; AAY93689.
XX
PT   New anti-polypeptide antibody useful in the treatment and diagnosis of
PT   neoplastic cell growth and proliferation.
XX
PS   Claim 50; Fig 11; 220pp; English.
XX
CC   The present sequence encodes a novel human polypeptide. The specification
CC   describes novel polypeptides designated PRO201, PRO292, PRO327, PRO1265,
CC   PRO344, PRO343, PRO347, PRO357, PRO715, PRO1017, PRO1112, PRO509, PRO853
CC   and PRO882. These genes are amplified in the genome of tumour cells. The
CC   polypeptides are believed to contribute to tumourigenesis. The
CC   polypeptides are useful target for the identification of certain cancers,
CC   and may act as predictors of the prognosis of tumour treatment.
CC   Antibodies against these polypeptides are useful in the treatment and
CC   diagnosis of neoplastic cell growth and proliferation in mammals
XX
SQ   Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 89;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   |  | | | | | | ||  |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32
```

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RESULT 90
ADC78574/c
ID   ADC78574 standard; cDNA; 1378 BP.
XX
AC   ADC78574;
XX
DT   01-JAN-2004  (first entry)
XX
DE   Human PRO343 cDNA.
XX
KW   antiinflamatory; antiulcer; cytostatic; antipsoriatic; antiparkinsonian;
KW   nootropic; neuroprotective; vasotropic; chemotaxic; angiogenic;
KW   neurotrophic; osteopathic; antiasthmatic; antiarthritic; antirheumatic;
KW   antiarteriosclerotic; cardiant; antidiabetic; cerebroprotective;
KW   thrombolytic; immunomodulator; enterocolitis; Zollinger-Ellison syndrome;
KW   gastrointestinal ulceration; psoriasis; cancer; Parkinson's disease;
KW   Alzheimer's; ALS; neuropathy; dermal scarring; wound healing;
KW   nerve repair; thrombosis; bone; cartilage formation; angiogenesis;
KW   asthma; rheumatoid arthritis; multiple sclerosis; inflammatory disorder;
KW   atherosclerosis; cardiac injury; infertility; premature aging; AIDS;
KW   diabetes; stroke; gene therapy; transgenic; PRO; human; ss; gene.
XX
OS   Homo sapiens.
XX
PN   WO200015796-A2.
XX
PD   23-MAR-2000.
XX
PF   15-SEP-1999;   99WO-US021090.
XX
PR   16-SEP-1998;   98WO-US019330.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Chen J,  Goddard A,  Gurney AL,  Hillan K,  Pennica D,  Wood WI;
PI   Yuan J;
XX
DR   WPI; 2000-271434/23.
DR   P-PSDB; ADC78575.
XX
PT   Novel nucleic acids encoding secreted and transmembrane polypeptides with
PT   homology, e.g. to growth and cancer-associated antigens.
XX
PS   Claim 2; SEQ ID NO 262; 355pp; English.
XX
CC   The invention relates to a novel nucleic acid encoding a PRO polypeptide.
CC   The polypeptides and polynucleotides of the invention may be useful as
CC   research tools and as therapeutics for treating enterocolitis, Zollinger-
CC   Ellison syndrome, gastrointestinal ulceration, psoriasis, cancer,
CC   Parkinson's disease, Alzheimer's disease, ALS, neuropathies, dermal
CC   scarring and wound healing, nerve repair, thrombosis, bone and/or
CC   cartilage formation, angiogenesis, asthma, rheumatoid arthritis, multiple
CC   sclerosis, inflammatory disorders, atherosclerosis, cardiac injury,
CC   infertility, premature aging, AIDS, diabetes complications and stroke.
CC   The molecules may also be utilised during gene therapy procedures and
CC   transgenic animal production. The current sequence is that of the human
CC   PRO cDNA of the invention.
XX
SQ   Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 89;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   |  | | | | | | ||  |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32
```

RESULT 91
AAF72420/c
ID AAF72420 standard; cDNA; 1378 BP.
XX
AC AAF72420;
XX
DT 24-APR-2001 (first entry)
XX
DE Human PRO343 cDNA.
XX
KW Human; PRO; dermatological; antipsoriatic; cytostatic; antiinflammatory;
KW antiparkinsonian nootropic; neuroprotective; vulnerary; cardiant;
KW antiangiogenic; vasotropic; antiasthmatic; antirheumatic; cancer;
KW antiarthritic; antiinfertility; antidiabetic; antiviral; diabetes;
KW ophthalmological; gene therapy; skin disease; gastrointestinal disorder;
KW ischaemia; inflammation; ss.
XX
OS Homo sapiens.
XX
PN WO200104311-A1.
XX
PD 18-JAN-2001.
XX
PF 22-FEB-2000; 2000WO-US004414.
XX
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi CJ, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2001-081051/09.
DR P-PSDB; AAB80259.
XX
PT Sixty one nucleic acids encoding PRO polypeptides which are useful in the
PT treatment of skin diseases (e.g. psoriasis), cancers (e.g. lung squamous
PT cell carcinoma) and neurodegenerative diseases (e.g. Alzheimer's
PT disease).
XX
PS Claim 2; Fig 97; 393pp; English.
XX
CC The present sequence is one of sixty one nucleic acids encoding novel
CC secreted and transmembrane PRO polypeptides. The PRO polypeptides are
CC useful for treating skin diseases (e.g. psoriasis), cancers (e.g. lung
CC squamous cell carcinoma), gastrointestinal disorders (e.g.
CC enterocolitis), neurodegenerative diseases (e.g. Alzheimer's disease,
CC Parkinson's disease), wound repair, cardiovascular disorders (e.g.
CC endometrial bleeding angiogenesis, ischaemias such as coronary ischaemia,
CC atherosclerosis), inflammatory disorders (e.g. asthma, rheumatoid
CC arthritis, multiple sclerosis), infertility, AIDS and diabetes and
CC retinal disorders such as retinitis pigmentosum. The PRO nucleic acids
CC have applications in molecular biology, including use as hybridization
CC probes, and in chromosome and gene mapping
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

Qy 399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
Db 131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy 459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
Db 71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32

RESULT 92
ACA59110/c
ID ACA59110 standard; cDNA; 1378 BP.
XX
AC ACA59110;
XX
DT 16-JUN-2003 (first entry)
XX
DE Human PRO polynucleotide #48.
XX
KW Human; PRO; gene; ss; secreted polypeptide; transmembrane polypeptide;
KW pathological disorder; cardiac insufficiency disorder; protein secretion;
KW pancreas; diabetes; gastrointestinal mucosa; mucosal lesion; psoriasis;
KW skin disease; keratinocyte differentiation; epithelial cancer; tumour;
KW lung squamous cell carcinoma; epidermoid carcinoma; vulva; glioma;
KW cytostatic; cardiant; endocrine; antidiabetic; gastrointestinal;
KW antiulcer; dermatological; vulnerary.
XX
OS Homo sapiens.
XX
PN US2002146709-A1.
XX
PD 10-OCT-2002.
XX
PF 18-JUL-2001; 2001US-00909088.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.

PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 01-DEC-1998; 98WO-US025108.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-328338/31.
DR P-PSDB; ABU71637.
XX
PT Isolated nucleic acid useful for e.g., treating pathological disorders
PT encodes a secreted or transmembrane protein.
XX
PS Claim 2; Fig 97; 473pp; English.
XX
CC The invention relates to human PRO polypeptides (secreted or
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC PRO polypeptides and polynucleotides can be used in treating pathological
CC disorders and tumours, in therapeutic treatment of cardiac insufficiency
CC disorders and in therapeutic treatment of disorders involving protein
CC secretion by the pancreas, including diabetes. They can also be used in
CC treating disorders associated with the preservation and maintenance of
CC gastrointestinal mucosa and the repair of acute and chronic mucosal
CC lesions, and skin diseases associated with abnormal keratinocyte
CC differentiation (e.g., psoriases, epithelial cancers such as lung
CC squamous cell carcinoma, epidermoid carcinoma of the vulva and gliomas).
CC The sequences can be used as molecular markers for protein
CC electrophoresis purposes and can be utilised in protein-protein binding
CC assays, biochemical screening assays, immunoassays and cell-based assays.
CC This sequence represents a human PRO polynucleotide of the invention
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

Qy 399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
Db 131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy 459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
Db 71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32

RESULT 93
ACA58507/c
ID ACA58507 standard; cDNA; 1378 BP.
XX
AC ACA58507;
XX
DT 10-JUN-2003 (first entry)
XX
DE cDNA encoding human PRO polypeptide #48.
XX
KW Human; secreted and transmembrane protein; PRO polypeptide; cancer;
KW Alzheimer's disease; ischaemia; cytostatic; nootropic; vasotropic;
KW neuroprotective; gene; ss.
XX
OS Homo sapiens.
XX
PN US2002192659-A1.
XX
PD 19-DEC-2002.
XX
PF 10-JUL-2001; 2001US-00902853.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.

PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 01-DEC-1998; 98WO-US025108.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
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PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-361832/34.
DR P-PSDB; ABU71492.
XX
PT New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO245 or
PT PRO1868, useful in molecular biology, chromosome and gene mapping, in
PT generating antisense RNA and DNA, and in gene therapy.
XX
PS Claim 2; Fig 97; 474pp; English.
XX
CC The present invention relates to the isolation of novel human secreted
CC and transmembrane proteins (PRO polypeptides), and the polynucleotide
CC sequences encoding them. The polynucleotide sequences are useful in
CC molecular biology, as hybridisation probes, in chromosome and gene
CC mapping, in generating antisense RNA and DNA, and in gene therapy. The
CC polynucleotide sequences may also be used in preparing PRO polypeptides
CC by recombinant techniques, and in generating either transgenic animals or
CC knock-out animals which, in turn, are useful in the development and
CC screening of therapeutically useful reagents. The PRO polypeptides or
CC their antibodies are useful in preparing a medicament for treating a
CC condition responsive to the polypeptide or antibody, such as cancer,
CC Alzheimer's disease or ischaemia, and in various diagnostic assays. The
CC present sequence encodes a human PRO polypeptide of the invention
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

Qy 399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
Db 131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy 459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
Db 71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32

RESULT 94
ACA60214/c
ID ACA60214 standard; cDNA; 1378 BP.
XX
AC ACA60214;
XX
DT 12-JUN-2003 (first entry)
XX
DE Human cDNA for secreted/transmembrane protein PRO343.
XX
KW Human; ss; gene; secreted protein; transmembrane protein; PRO;
KW gene therapy; chromosome identification; chromosome marker.
XX
OS Homo sapiens.
XX
PN US2003003530-A1.
XX
PD 02-JAN-2003.
XX
PF 11-JUL-2001; 2001US-00904011.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.

PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 01-DEC-1998; 98WO-US025108.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-329602/31.
DR P-PSDB; ABU71938.
XX
PT New transmembrane polypeptides and nucleic acids encoding the
PT polypeptides, useful in gene therapy, in chromosome identification, as
PT chromosome markers, in generating probes and in tissue typing.
XX
PS Claim 2; Fig 97; 484pp; English.
XX
CC The invention relates to an isolated nucleic acid with at least 80%
CC nucleic acid sequence identity to a nucleotide sequence encoding one of
CC 61 secreted/transmembrane polypeptides, or PRO polypeptides or encoding a
CC PRO protein extracellular domain. Also included are a vector comprising
CC the PRO nucleic acid, a host cell comprising the vector, producing a PRO
CC polypeptide (by culturing the host cell for the expression of the PRO
CC polypeptide, and recovering the PRO polypeptide from the cell culture),
CC an isolated PRO polypeptide (having at least 80% sequence identity to: (
CC a) an amino acid sequence selected from the 61 PRO proteins; (b) an amino
CC acid sequence encoded by a nucleic acid molecule deposited with an ATCC
CC number (detailed in the specification); or (c) an extracellular domain of
CC a PRO polypeptide or to a PRO polypeptide lacking its associated signal
CC peptide), a chimaeric molecule comprising a PRO polypeptide of fused to a
CC heterologous amino acid sequence, an anti-PRO antibody, detecting a
CC PRO245 or PRO1868 in a sample suspected of containing the polypeptide,
CC linking a bioactive molecule to a cell expressing a PRO245 or PRO1868 and
CC modulating at least one biological activity of a cell expressing a PRO245
CC or PRO1868. Nucleic acids which encode PRO can be used to generate either
CC transgenic animals or knock-out animals which may be used in the
CC development and screening of therapeutically useful reagents. The nucleic
CC acids may also be used in gene therapy, in chromosome identification, as
CC chromosome markers, or in generating probes. The PRO polypeptides are
CC useful as molecular markers for protein electrophoresis, and the isolated
CC nucleic acids may be used for recombinantly expressing those markers. The
CC PRO polypeptides and nucleic acids may also be used in tissue typing.
CC Anti-PRO antibodies are useful in diagnostic assays for PRO, and in
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. The present sequence encodes a PRO protein
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

Qy 399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
Db 131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy 459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
Db 71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32

RESULT 95
ACD07614/c
ID ACD07614 standard; cDNA; 1378 BP.
XX
AC ACD07614;
XX
DT 07-AUG-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO343 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; pharmaceutical;
KW diagnostic; biosensor; bioreactor; Parkinson's disease;
KW Alzheimer's disease; inflammation; nephritis; wound healing;
KW nerve repair; collateral blood vessel formation; cancer;
KW colorectal cancer; haemorrhage; rheumatoid arthritis; diabetes;
KW cirrhosis; fibrosis; restenosis; dermal fibrotic condition; keloid;
KW scarring; ischaemia; stroke; hypertension; heart attack; atherosclerosis;
KW infertility; gene therapy; gene; ss.
XX
OS Homo sapiens.
XX
PN US2002197671-A1.
XX
PD 26-DEC-2002.
XX
PF 17-JUL-2001; 2001US-00907824.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.

PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 01-DEC-1998; 98WO-US025108.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
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PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
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PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-370793/35.
DR P-PSDB; AB001821.
XX
PT New genes and secreted and transmembrane polypeptides (e.g. PRO245 or
PT PRO335), useful for treating or diagnosing e.g. Alzheimer's disease,
PT cancers, hemorrhage, rheumatoid arthritis, diabetes, cirrhosis, ischemia
PT or strokes.
XX
PS Claim 2; Fig 97; 482pp; English.
XX
CC The invention describes a new isolated nucleic acid molecule comprising
CC the full length coding sequence of the DNA deposited with the American
CC Type Culture Collection (e.g. ATCC Deposit No. 209258) ,or a sequence
CC with at least 80% identity to a DNA encoding a PRO polypeptide comprising
CC any of 61 sequences having 164-1119 amino acids fully defined in the
CC specification. The PRO polypeptides or polynucleotides are useful as
CC pharmaceuticals, diagnostics, biosensors or bioreactors. These are
CC particularly useful for detecting or treating e.g. Parkinson's disease,
CC Alzheimer's disease, inflammations, nephritis, wound healing, nerve
CC repair, collateral blood vessel formation, cancers (e.g. colorectal
CC cancer), haemorrhage (or reduce risk for haemorrhage), rheumatoid
CC arthritis, diabetes, cirrhosis of the liver, fibrosis of the lungs,
CC restenosis, dermal fibrotic conditions (e.g. keloids or scarring),
CC ischaemia, strokes, hypertension, heart attacks, atherosclerosis, or
CC infertility in mammals (e.g. humans, dogs, cats, cattle, horses, sheep,
CC pigs, goats, or rabbits) The PRO polypeptides are useful as targets for
CC therapeutic intervention in these diseases, and diagnostic determination
CC of the presence of these diseases. The PRO polypeptides are also useful
CC as molecular weight markers, or for chromosome identification. The PRO
CC genes are useful as hybridisation probes, or for screening libraries of
CC human cDNA, genomic DNA or mRNA. The PRO genes may also be used in gene
CC therapy, particularly for replacing a defective gene. This sequence
CC encodes a novel human secreted and transmembrane PRO polypeptide
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

Qy 399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
Db 131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy 459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
Db 71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32

RESULT 96
ABX71662/c
ID ABX71662 standard; cDNA; 1378 BP.
XX
AC ABX71662;
XX
DT 10-MAR-2003 (first entry)
XX
DE Human cDNA encoding secreted/transmembrane protein PRO343.
XX
KW Human; PRO; secreted protein; transmembrane protein; enterocolitis;
KW gastrointestinal ulceration; skin disease; ss; gene;
KW abnormal keratinocyte differentiation; psoriasis; epithelial cancer;
KW squamous cell carcinoma; Alzheimer's disease; Parkinson's disease;

KW amyotrophic lateral sclerosis; inflammatory disease;
KW rheumatoid arthritis; asthma; multiple sclerosis; organ failure;
KW atherosclerosis; cardiac injury; infertility; birth defect;
KW premature aging; AIDS; acquired immunodeficiency syndrome; cancer;
KW diabetic complication; wound repair.
XX
OS Homo sapiens.
XX
PN US2002132240-A1.
XX
PD 19-SEP-2002.
XX
PF 18-JUL-2001; 2001US-00909320.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 01-DEC-1998; 98WO-US025108.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 06-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-147434/14.
DR P-PSDB; ABU54394.
XX
PT New PRO polypeptides and nucleic acid molecules, useful in diagnosing or
PT treating inflammatory diseases, organ failure, atherosclerosis, cardiac
PT injury, infertility, cancer, AIDS, Alzheimer's disease or Parkinson's
PT disease.
XX
PS Claim 2; Fig 97; 473pp; English.
XX
CC The invention relates to an isolated PRO polypeptide having at least 80%
CC amino acid sequence identity to: (a) any one of 61 fully defined amino
CC acid sequences given in the specification (appearing as ABU54347-
CC ABU54407); (b) an amino acid sequence encoded by the nucleotide sequence
CC deposited under American Type Culture Collection (accession numbers
CC listed in the specification); (c) any one of the PRO sequences which
CC lacks its associated signal peptide; (d) an extracellular domain of the
CC PRO polypeptide with its associated signal peptide; or (e) an
CC extracellular domain of the PRO polypeptide which lacks its associated
CC signal peptide. Also include are the nucleic acids encoding the PRO
CC polypeptides, vectors, host cells and anti-PRO antibodies. The PRO
CC polypeptides and nucleic acids are useful in diagnosing or treating
CC enterocolitis, gastrointestinal ulceration, skin diseases associated with
CC abnormal keratinocyte differentiation, e.g. psoriasis or epithelial
CC cancers such as squamous cell carcinoma, Alzheimer's disease, Parkinson's
CC disease, amyotrophic lateral sclerosis, inflammatory diseases, e.g.
CC rheumatoid arthritis, asthma or multiple sclerosis, organ failure,
CC atherosclerosis, cardiac injury, infertility, birth defects, premature
CC aging, AIDS, cancer, diabetic complications, or mutations in general. The
CC polypeptides are also useful for wound repair and associated therapies
CC concerned with re-growth of tissue. The nucleotide sequences may be used
CC as hybridisation probes in chromosome and gene mapping, or in generating
CC antisense RNA and DNA. PRO nucleic acids are also useful in preparing PRO
CC polypeptides, in assays to identify other proteins or molecules involved
CC in binding reaction, to generate transgenic animals or knockout animals,
CC which in turn are useful in the development and screening of
CC therapeutically useful reagents, for chromosome identification, and
CC tissue typing. The PRO polypeptides and nucleic acid molecules are also
CC useful in gene therapy, and as molecular weight markers for protein
CC electrophoresis purposes. The anti-PRO antibodies may be used in
CC diagnostic assays for PRO, or for the affinity purification of PRO from
CC recombinant cell culture or natural sources. The present sequence encodes
CC a PRO polypeptide
XX

```
SQ   Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 89;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   |  |  | | | |  | || |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32


RESULT 97
ACH06994/c
ID   ACH06994 standard; cDNA; 1378 BP.
XX
AC   ACH06994;
XX
DT   08-OCT-2003  (first entry)
XX
DE   Human secreted/transmembrane polypeptide PRO343 cDNA.
XX
KW   Human; gene; ss; abnormal bleeding; gynaecological disease; asthma;
KW   hysterectomy; angiogenesis; coronary ischaemic condition; skin disease;
KW   gastrointestinal mucosa disorder; acute mucosal lesion; neuropathy; ALS;
KW   chronic mucosal lesion; abnormal keratinocyte differentiation; psoriasis;
KW   Parkinson's disease; Alzheimer's disease; amyotrophic lateral sclerosis;
KW   uncontrolled cell growth; cancer; blood coagulation cascade; thrombosis;
KW   haemorrhage; endometrial bleeding; angiogenesis; wound healing; tumour;
KW   tissue repair; rheumatoid arthritis; multiple sclerosis; tissue typing.
XX
OS   Homo sapiens.
XX
PN   US2003044839-A1.
XX
PD   06-MAR-2003.
XX
PF   10-JUL-2001; 2001US-00902903.
XX
PR   17-SEP-1997;   97US-0059113P.
PR   17-SEP-1997;   97US-0059115P.
PR   17-SEP-1997;   97US-0059117P.
PR   17-SEP-1997;   97US-0059119P.
PR   17-SEP-1997;   97US-0059121P.
PR   17-SEP-1997;   97US-0059122P.
PR   17-SEP-1997;   97US-0059184P.
PR   18-SEP-1997;   97US-0059263P.
PR   18-SEP-1997;   97US-0059266P.
PR   15-OCT-1997;   97US-0062125P.
PR   17-OCT-1997;   97US-0062285P.
PR   17-OCT-1997;   97US-0062287P.
PR   21-OCT-1997;   97US-0063486P.
PR   24-OCT-1997;   97US-0062814P.
PR   24-OCT-1997;   97US-0062816P.
PR   24-OCT-1997;   97US-0063045P.
PR   24-OCT-1997;   97US-0063120P.
PR   24-OCT-1997;   97US-0063121P.
PR   24-OCT-1997;   97US-0063127P.
PR   24-OCT-1997;   97US-0063128P.
PR   27-OCT-1997;   97US-0063327P.
PR   27-OCT-1997;   97US-0063329P.
PR   28-OCT-1997;   97US-0063541P.
PR   28-OCT-1997;   97US-0063542P.
PR   28-OCT-1997;   97US-0063544P.
PR   28-OCT-1997;   97US-0063549P.
PR   28-OCT-1997;   97US-0063550P.
PR   28-OCT-1997;   97US-0063564P.
PR   29-OCT-1997;   97US-0063435P.
PR   29-OCT-1997;   97US-0063704P.
PR   29-OCT-1997;   97US-0063732P.
PR   29-OCT-1997;   97US-0063734P.
PR   29-OCT-1997;   97US-0063735P.
PR   29-OCT-1997;   97US-0063738P.
PR   29-OCT-1997;   97US-0064215P.
PR   31-OCT-1997;   97US-0063870P.
PR   31-OCT-1997;   97US-0064103P.
PR   03-NOV-1997;   97US-0064248P.
PR   07-NOV-1997;   97US-0064809P.
PR   12-NOV-1997;   97US-0065186P.
PR   17-NOV-1997;   97US-0065846P.
PR   18-NOV-1997;   97US-0065693P.
PR   21-NOV-1997;   97US-0066120P.
PR   21-NOV-1997;   97US-0066364P.
PR   24-NOV-1997;   97US-0066453P.
PR   24-NOV-1997;   97US-0066466P.
PR   24-NOV-1997;   97US-0066511P.
PR   24-NOV-1997;   97US-0066770P.
PR   24-NOV-1997;   97US-0066772P.
PR   25-NOV-1997;   97US-0066840P.
PR   12-DEC-1997;   97US-0069425P.
PR   04-JUN-1998;   98US-0088026P.
PR   10-SEP-1998;   98US-0099803P.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98US-0100262P.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98US-0100858P.
PR   17-SEP-1998;   98WO-US019437.
PR   13-OCT-1998;   98US-0104080P.
PR   20-NOV-1998;   98US-0109304P.
PR   01-DEC-1998;   98WO-US025108.
PR   22-DEC-1998;   98US-0113296P.
PR   07-JUL-1999;   99US-0143048P.
PR   26-JUL-1999;   99US-0145698P.
PR   28-JUL-1999;   99US-0146222P.
PR   08-SEP-1999;   99WO-US020594.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   01-DEC-1999;   99WO-US028301.
PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   20-DEC-1999;   99WO-US030999.
PR   05-JAN-2000; 2000WO-US000219.
PR   11-FEB-2000; 2000WO-US003565.
PR   22-FEB-2000; 2000WO-US004414.
PR   24-FEB-2000; 2000WO-US005004.
PR   02-MAR-2000; 2000WO-US005841.
PR   20-MAR-2000; 2000WO-US007377.
PR   30-MAR-2000; 2000WO-US008439.
PR   22-MAY-2000; 2000WO-US014042.
PR   02-JUN-2000; 2000WO-US015264.
PR   28-JUL-2000; 2000WO-US020710.
PR   24-AUG-2000; 2000WO-US023328.
PR   18-SEP-2000; 2000US-00665350.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi A,  Botstein D,  Desnoyers L,  Eaton DL,  Ferrara N;
PI   Filvaroff E,  Fong S,  Gao W,  Gerber H,  Gerritsen ME,  Goddard A;
PI   Godowski PJ,  Grimaldi JC,  Gurney AL,  Hillan KJ,  Kljavin IJ;
PI   Mather JP,  Pan J,  Paoni NF,  Roy MA,  Stewart TA,  Tumas D;
PI   Williams PM,  Wood WI;
XX
DR   WPI; 2003-492258/46.
DR   P-PSDB; ABO47409.
XX
PT   Novel secreted and transmembrane polypeptides and polynucleotides
```

PT encoding them useful for treating abnormal bleeding involved in
PT gynecological diseases, skin diseases and neurodegenerative diseases.
XX
PS Claim 3; Fig 97; 478pp; English.
XX
CC The invention relates to an isolated PRO polypeptide. PRO317 is useful in
CC diagnosing or treating abnormal bleeding involved in gynecological
CC diseases e.g. to avoid or lessen the need for hysterectomy. PRO317 may
CC also be useful as an agent that affects angiogenesis and PRO317 is useful
CC in anti-tumour indications or in treating coronary ischaemic conditions.
CC PRO211 and PRO217 polypeptides are useful for treating disorders
CC associated with the preservation and maintenance of gastrointestinal
CC mucosa and the repair of acute and chronic mucosal lesions, skin diseases
CC associated with abnormal keratinocyte differentiation (e.g. psoriasis).
CC PRO187 polypeptide is useful for treating Parkinson's disease,
CC Alzheimer's disease, amyotrophic lateral sclerosis (ALS), neuropathies
CC and disease related to uncontrolled cell growth, e.g. cancer. PRO219
CC polypeptide plays a regulatory role in the blood coagulation cascade.
CC PRO246 polypeptides which serves as tumour specific antigens may be
CC exploited as therapeutic targets for anti-tumour drugs. PRO269
CC polypeptide is useful as an antithrombotic agent with reduced risk for
CC haemorrhage as compared with heparin. PRO317 polypeptide is useful in
CC treating endometrial bleeding angiogenesis. PRO287 polypeptides and
CC portion have therapeutic applications in wound healing and tissue repair.
CC PRO234 polypeptides are useful for treating asthma, rheumatoid arthritis,
CC psoriasis and multiple sclerosis. The polypeptide and its nucleic acid
CC are useful for tissue typing. PRO antibodies are useful for
CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
CC expression in specific cells, tissues or serum and for affinity
CC purification of PRO from recombinant cell culture or natural sources. The
CC present sequence represents cDNA encoding a human secreted/transmembrane
CC PRO polypeptide
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

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Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   |  |  | | | |  | || |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32
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RESULT 98
ABX96231/c
ID ABX96231 standard; cDNA; 1378 BP.
XX
AC ABX96231;
XX
DT 13-MAY-2003 (first entry)
XX
DE Human secreted/transmembrane protein cDNA, #50.
XX
KW Human; gene; ss; PRO; secreted; transmembrane; pharmaceutical;
KW diagnostic; biosensor; bioreactor; therapeutic; hyperplasia;
KW endometriosis; cancer; tumour; ischaemia; coronary arterial disease;
KW polycystic kidney disease; renal failure; inflammatory response; asthma;
KW rheumatoid arthritis; psoriasis; multiple sclerosis; gene therapy;
KW cytostatic; gynecological; cardiant; nephrotropic; hepatotropic;
KW antiinflammatory.
XX
OS Homo sapiens.
XX
PN US2002160374-A1.
XX
PD 31-OCT-2002.
XX
PF 12-JUL-2001; 2001US-00905291.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 01-DEC-1998; 98WO-US025108.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.

```
PR   02-MAR-2000; 2000WO-US005841.
PR   20-MAR-2000; 2000WO-US007377.
PR   30-MAR-2000; 2000WO-US008439.
PR   22-MAY-2000; 2000WO-US014042.
PR   02-JUN-2000; 2000WO-US015264.
PR   28-JUL-2000; 2000WO-US020710.
PR   24-AUG-2000; 2000WO-US023328.
PR   18-SEP-2000; 2000US-00665350.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi A,  Botstein D,  Desnoyers L,  Eaton DL,  Ferrara N;
PI   Filvaroff E,  Fong S,  Gao W,  Gerber H,  Gerritsen ME,  Goddard A;
PI   Godowski PJ,  Grimaldi JC,  Gurney AL,  Hillan KJ,  Kljavin IJ;
PI   Mather JP,  Pan J,  Paoni NF,  Roy MA,  Stewart TA,  Tumas D;
PI   Williams PM,  Wood WI;
XX
DR   WPI; 2003-288105/28.
DR   P-PSDB; ABU64546.
XX
PT   New secreted and transmembrane PRO polypeptides (e.g. PRO533 or PRO245)
PT   and genes encoding them, useful for detecting or treating e.g.
PT   hyperplasia, endometriosis, cancers, ischemia, coronary arterial disease
PT   or inflammations.
XX
PS   Claim 2; Fig 97; 477pp; English.
XX
CC   The invention discloses isolated PRO secreted/transmembrane polypeptides
CC   and the nucleic acid encoding them. The polypeptides can be used to raise
CC   antibodies that specifically bind to the PRO polypeptide, for linking a
CC   bioactive molecule to a cell expressing a PRO protein and for modulating
CC   at least one biological activity of a cell. The PRO polypeptides or
CC   polynucleotides are also useful as pharmaceuticals, diagnostics,
CC   biosensors or bioreactors, for detecting or treating e.g. hyperplasia,
CC   endometriosis, cancers (e.g. those involving solid tumours), ischaemia,
CC   coronary arterial disease, polycystic kidney disease, chronic or acute
CC   renal failure, or inflammatory responses (e.g. asthma, rheumatoid
CC   arthritis, psoriasis or multiple sclerosis) in mammals. The PRO genes may
CC   also be used in gene therapy, particularly for replacing a defective
CC   gene. The sequences presented in ABX96017-ABX96378 are the genes
CC   encoding, the primers amplifying and the probes detecting the PRO
CC   polynucleotides of the invention
XX
SQ   Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 89;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   |  | | | | | | | |||  |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
                  | |   | ||  |  | | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32


RESULT 99
ACA05552/c
ID   ACA05552 standard; cDNA; 1378 BP.
XX
AC   ACA05552;
XX
DT   29-MAY-2003  (first entry)
XX
DE   cDNA encoding human secreted protein PRO343.
XX
KW   Human; gene therapy; mucosal lesion; ulcer; enterocolitis; skin disease;
KW   psoriasis; cancer; lung cancer; colon cancer; nerve cell disease;
KW   Alzheimer's disease; Parkinson's disease; Usher syndrome; angiogenesis;
KW   atrophia areata; inflammatory disease; asthma; rheumatoid arthritis;
XX
OS   Homo sapiens.
XX
PN   US2003023054-A1.
XX
PD   30-JAN-2003.
XX
PF   16-JUL-2001; 2001US-00906742.
XX
PR   17-SEP-1997;   97US-0059113P.
PR   17-SEP-1997;   97US-0059115P.
PR   17-SEP-1997;   97US-0059117P.
PR   17-SEP-1997;   97US-0059119P.
PR   17-SEP-1997;   97US-0059121P.
PR   17-SEP-1997;   97US-0059122P.
PR   17-SEP-1997;   97US-0059184P.
PR   18-SEP-1997;   97US-0059263P.
PR   18-SEP-1997;   97US-0059266P.
PR   15-OCT-1997;   97US-0062125P.
PR   17-OCT-1997;   97US-0062285P.
PR   17-OCT-1997;   97US-0062287P.
PR   21-OCT-1997;   97US-0063486P.
PR   24-OCT-1997;   97US-0062814P.
PR   24-OCT-1997;   97US-0062816P.
PR   24-OCT-1997;   97US-0063045P.
PR   24-OCT-1997;   97US-0063120P.
PR   24-OCT-1997;   97US-0063121P.
PR   24-OCT-1997;   97US-0063127P.
PR   24-OCT-1997;   97US-0063128P.
PR   27-OCT-1997;   97US-0063327P.
PR   27-OCT-1997;   97US-0063329P.
PR   28-OCT-1997;   97US-0063541P.
PR   28-OCT-1997;   97US-0063542P.
PR   28-OCT-1997;   97US-0063544P.
PR   28-OCT-1997;   97US-0063549P.
PR   28-OCT-1997;   97US-0063550P.
PR   28-OCT-1997;   97US-0063564P.
PR   29-OCT-1997;   97US-0063435P.
PR   29-OCT-1997;   97US-0063704P.
PR   29-OCT-1997;   97US-0063732P.
PR   29-OCT-1997;   97US-0063734P.
PR   29-OCT-1997;   97US-0063735P.
PR   29-OCT-1997;   97US-0063738P.
PR   29-OCT-1997;   97US-0064215P.
PR   31-OCT-1997;   97US-0063870P.
PR   31-OCT-1997;   97US-0064103P.
PR   03-NOV-1997;   97US-0064248P.
PR   07-NOV-1997;   97US-0064809P.
PR   12-NOV-1997;   97US-0065186P.
PR   17-NOV-1997;   97US-0065846P.
PR   18-NOV-1997;   97US-0065693P.
PR   21-NOV-1997;   97US-0066120P.
PR   21-NOV-1997;   97US-0066364P.
PR   24-NOV-1997;   97US-0066453P.
PR   24-NOV-1997;   97US-0066466P.
PR   24-NOV-1997;   97US-0066511P.
PR   24-NOV-1997;   97US-0066770P.
PR   24-NOV-1997;   97US-0066772P.
PR   25-NOV-1997;   97US-0066840P.
PR   12-DEC-1997;   97US-0069425P.
PR   04-JUN-1998;   98US-0088026P.
PR   10-SEP-1998;   98US-0099803P.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98US-0100262P.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98US-0100858P.
PR   17-SEP-1998;   98WO-US019437.
PR   13-OCT-1998;   98US-0104080P.
PR   20-NOV-1998;   98US-0109304P.
PR   01-DEC-1998;   98WO-US025108.
PR   22-DEC-1998;   98US-0113296P.
PR   07-JUL-1999;   99US-0143048P.
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PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-331485/31.
DR P-PSDB; ABU67392.
XX
PT Sixty one isolated nucleic acids encoding a PRO polypeptide, e.g. PRO245
PT or PRO1868, useful in chromosome and gene mapping, in generating
PT antisense RNA and DNA, and in treating cancer and Alzheimer's disease.
XX
PS Example 41; Fig 97; 481pp; English.
XX
CC The invention relates to sixty one nucleic acids encoding PRO
CC polypeptides (secreted and transmembrane). The polynucleotide is useful
CC in molecular biology, including uses as hybridisation probes, in
CC chromosome and gene mapping, in generating antisense RNA and DNA, and in
CC gene therapy. The polynucleotide may also be used in preparing PRO
CC polypeptides by recombinant techniques, and in generating either
CC transgenic animals or knock-out animals which, in turn, are useful in the
CC development and screening of therapeutically useful reagents. The PRO
CC polypeptide or the antibody is used in preparing a medicament for
CC treating a condition responsive to the polypeptide or antibody, such as
CC mucosal lesions e.g. ulcers and enterocolitis, skin disease e.g.
CC psoriasis, cancer e.g. lung cancer and colon cancer, nerve cell disease
CC e.g. Alzheimer's disease and Parkinson's disease, Usher syndrome,
CC atrophia areata, angiogenesis, inflammatory disease e.g asthma and
CC rheumatoid arthritis, ischaemia, and in various diagnostic assays. The
CC present sequence represents an cDNA which encodes a PRO polypeptide
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

Qy 399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
Db 131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy 459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
Db 71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32

RESULT 100
ACD20219/c
ID ACD20219 standard; cDNA; 1378 BP.
XX
AC ACD20219;
XX
DT 25-AUG-2003 (first entry)
XX
DE Human secreted / transmembrane polypeptide PRO343 cDNA.
XX
KW Human; ss; gene; gene therapy; tumour; tissue typing; obesity; diabetes;
KW hypoinsulinaemia; hyperinsulinaemia; vascular permeability;
KW cardiac insufficiency disorder; immune response; regeneration; cartilage;
KW auditory hair cell; hearing loss; bone disorder; sports injury;
KW arthritis.
XX
OS Homo sapiens.
XX
PN US2003036060-A1.
XX
PD 20-FEB-2003.
XX
PF 12-JUL-2001; 2001US-00904859.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.

PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-417923/39.
DR P-PSDB; ABO14912.
XX
PT Novel secreted and transmembrane polypeptide for modulating biological
PT activity of cell expressing the polypeptide, identifying agonists or
PT antagonists of polypeptide, and as molecular weight markers.
XX
PS Claim 2; Fig 97; 469pp; English.
XX
CC The invention relates to an isolated, secreted and transmembrane
CC polypeptide, termed PRO polypeptide. The polypeptide is useful for
CC identifying agonists or antagonists of the polypeptide, for preparing
CC variants of the polypeptide, as molecular weight markers for protein
CC electrophoresis purpose and the nucleic acid is useful for recombinantly
CC expressing those markers. The polypeptide is also useful as therapeutic
CC agent. PRO is useful in assays to identify other proteins or molecules
CC involved in binding interaction. The nucleic acid is useful as
CC hybridisation probes, in chromosome and gene mapping, in generation of
CC antisense RNA and DNA, in the preparation of PRO polypeptide, for
CC generating transgenic animals or knockout animals which in turn are
CC useful in the development and screening of therapeutically useful
CC reagents, to construct hybridisation probes for mapping the gene which
CC encodes the PRO and for the genetic analysis of individuals with genetic
CC disorders, in gene therapy, for chromosome identification, as chromosome
CC marker, and for generating probes for polymerase chain reaction (PCR),
CC Northern analysis, Southern analysis and Western analysis. PRO antibody
CC is useful in diagnostic assays for PRO, e.g. detecting its expression in
CC specific cells, tissues or serum and for affinity purification of PRO
CC from recombinant cell culture or natural sources. The polypeptide or its
CC antibody is useful for the preparation of medicament for treating
CC conditions which is responsive to the PRO polypeptide or anti-PRO
CC antibody e.g. tumour. The polypeptide and the nucleic acid is useful for
CC tissue typing. The polypeptide is useful for treating obesity, diabetes
CC or hypo- or hyper-insulinaemia and cardiac insufficiency disorders, for
CC inhibiting tumour growth, enhances vascular permeability and immune
CC response, for inducing regeneration of auditory hair cells and for
CC treating hearing loss in mammals and for treating bone and/or cartilage
CC disorders such as sports injuries and arthritis. The present sequence
CC represents cDNA encoding a human secreted and transmembrane PRO
CC polypeptide
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

Qy 399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
Db 131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy 459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
Db 71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32

RESULT 101
ACA55022/c
ID ACA55022 standard; cDNA; 1378 BP.
XX
AC ACA55022;
XX
DT 05-JUN-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO343 cDNA.
XX
KW Human; secreted and transmembrane protein; gene therapy; psoriasis;
KW enterocolitis; gastrointestinal ulceration; skin disease;
KW keratinocyte differentiation; epithelial cancer; Alzheimer's disease;
KW squamous cell carcinoma; Parkinson's disease; inflammatory disease;
KW amyotrophic lateral sclerosis; rheumatoid arthritis; asthma;
KW multiple sclerosis; organ failure; atherosclerosis; cardiac injury;
KW infertility; birth defect; premature aging; AIDS; cancer;
KW diabetic complication; wound repair; tissue re-growth; gene; ss.
XX
OS Homo sapiens.
XX
PN US2003017463-A1.
XX
PD 23-JAN-2003.
XX
PF 11-JUL-2001; 2001US-00903640.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.

PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-341586/32.
DR P-PSDB; ABU69669.
XX
PT New PRO polypeptides and nucleic acid molecules, useful in diagnosing or
PT treating inflammatory diseases, organ failure, atherosclerosis, cardiac
PT injury, infertility, cancer, AIDS, Alzheimer's disease or Parkinson's
PT disease.
XX
PS Claim 2; Fig 97; 473pp; English.
XX
CC The invention describes sixty one nucleic acids encoding PRO polypeptides
CC (secreted and transmembrane). The PRO polypeptides and nucleic acids are
CC useful in diagnosing or treating enterocolitis, gastrointestinal
CC ulceration, skin diseases associated with abnormal keratinocyte
CC differentiation, e.g. psoriasis or epithelial cancers such as squamous
CC cell carcinoma, Alzheimer's disease, Parkinson's disease, amyotrophic
CC lateral sclerosis, inflammatory diseases, e.g. rheumatoid arthritis,
CC asthma or multiple sclerosis, organ failure, atherosclerosis, cardiac
CC injury, infertility, birth defects, premature aging, AIDS, cancer,
CC diabetic complications, or mutations in general. The polypeptides are
CC also useful for wound repair and associated therapies concerned with re-
CC growth of tissue. The PRO polypeptides and nucleic acid molecules are
CC also useful in gene therapy, and as molecular weight markers for protein
CC electrophoresis purposes. The anti-PRO antibodies may be used in
CC diagnostic assays for PRO, or for the affinity purification of PRO from
CC recombinant cell culture or natural sources. This sequence encodes a
CC novel human PRO polypeptide
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

```
Qy      399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
            | | | |   |||  ||||| |||   | |   |  | | | | | | || |   ||
Db      131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy      459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
                | |  | ||  |  | |||| || ||  | ||  ||| |
Db       71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32
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RESULT 102
ACD19857/c
ID ACD19857 standard; cDNA; 1378 BP.
XX
AC ACD19857;
XX
DT 22-AUG-2003 (first entry)
XX
DE Human secreted / transmembrane polypeptide PRO343 cDNA.
XX
KW Human; ss; gene; gene therapy; apoptosis; bleeding; tumour; ALS;

KW gynaecological disease; hysterectomy; angiogenesis; skin disease; cancer;
KW coronary ischaemic condition; gastrointestinal mucosa disorder; asthma;
KW mucosal lesion repair; keratinocyte differentiation; psoriasis;
KW Parkinson's disease; Alzheimer's disease; amyotrophic lateral sclerosis;
KW neuropathy; blood coagulation cascade disorder; thrombosis; haemorrhage;
KW neurodegenerative disease; endometrial bleeding; wound healing;
KW tissue repair; rheumatoid arthritis; multiple sclerosis; tissue typing.
XX
OS Homo sapiens.
XX
PN US2003027143-A1.
XX
PD 06-FEB-2003.
XX
PF 16-JUL-2001; 2001US-00906838.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-417249/39.
DR P-PSDB; ABO14851.
XX
PT Novel secreted and transmembrane polypeptides and polynucleotides
PT encoding them useful for treating abnormal bleeding involved in
PT gynecological diseases, skin diseases and neurodegenerative diseases.
XX
PS Claim 2; Fig 97; 467pp; English.
XX
CC The invention relates to an isolated secreted and transmembrane PRO
CC polypeptide. The PRO polypeptides are useful for modulating biological
CC activity of a cell, in diagnosing or treating abnormal bleeding involved
CC in gynaecological diseases e.g. to avoid or lessen the need for
CC hysterectomy, for treating angiogenesis, tumour, coronary ischaemic
CC condition, disorders associated with the preservation and maintenance of
CC gastrointestinal mucosa and the repair of acute and chronic mucosal
CC lesions, skin diseases associated with abnormal keratinocyte
CC differentiation (e.g. psoriasis), Parkinson's disease, Alzheimer's
CC disease, amyotrophic lateral sclerosis (ALS), neuropathies, disease
CC related to uncontrolled cell growth (e.g. cancer), blood coagulation
CC cascade disorders, neurodegenerative disease, thrombosis, haemorrhage,
CC endometrial bleeding, wound healing, tissue repair, asthma, rheumatoid
CC arthritis, multiple sclerosis. Nucleic acid encoding PRO polypeptides are
CC useful in molecular biology including uses as hybridisation probes and in
CC the generation of antisense RNA and DNA, for preparing PRO polypeptides,
CC for generating transgenic animals or knockout animals. The PRO
CC polypeptides and their nucleic acids are useful for tissue typing. PRO
CC antibodies are useful for immunohistochemical staining and/or assay of
CC sample fluids. Anti-PRO antibodies are useful in diagnostic assays for
CC PRO e.g. detecting its expression in specific cells, tissues or serum and

```
CC   for affinity purification of PRO from recombinant cell culture or natural
CC   sources. The present sequence represents cDNA encoding a human secreted
CC   and transmembrane PRO polypeptide
XX
SQ   Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 89;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   |  | | | | | | ||| |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32


RESULT 103
ADB29467/c
ID   ADB29467 standard; cDNA; 1378 BP.
XX
AC   ADB29467;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Human secreted/transmembrane protein cDNA, #52.
XX
KW   Human; gene; ss; PRO; secreted; transmembrane; gastrointestinal mucosa;
KW   mucosal lesion; skin disease; keratinocyte differentiation; psoriasis;
KW   Parkinson's disease; Alzheimer's diseases; amyotrophic lateral sclerosis;
KW   ALS; neuropathy; cell growth; cancer; tumour; viral infection;
KW   neurodegenerative disease; antithrombotic agent; haemorrhage;
KW   endometrial bleeding angiogenesis; kidney tissue; apoptosis; therapeutic;
KW   tissue typing; immunohistochemical staining; gene therapy; nootropic;
KW   neuroprotective; cytostatic; virucide; anticoagulant.
XX
OS   Homo sapiens.
XX
PN   US2003092002-A1.
XX
PD   15-MAY-2003.
XX
PF   10-JUL-2001; 2001US-00902615.
XX
PR   17-SEP-1997;   97US-0059113P.
PR   17-SEP-1997;   97US-0059115P.
PR   17-SEP-1997;   97US-0059117P.
PR   17-SEP-1997;   97US-0059119P.
PR   17-SEP-1997;   97US-0059121P.
PR   17-SEP-1997;   97US-0059122P.
PR   17-SEP-1997;   97US-0059184P.
PR   18-SEP-1997;   97US-0059263P.
PR   18-SEP-1997;   97US-0059266P.
PR   15-OCT-1997;   97US-0062125P.
PR   17-OCT-1997;   97US-0062285P.
PR   17-OCT-1997;   97US-0062287P.
PR   21-OCT-1997;   97US-0063486P.
PR   24-OCT-1997;   97US-0062814P.
PR   24-OCT-1997;   97US-0062816P.
PR   24-OCT-1997;   97US-0063045P.
PR   24-OCT-1997;   97US-0063120P.
PR   24-OCT-1997;   97US-0063121P.
PR   24-OCT-1997;   97US-0063127P.
PR   24-OCT-1997;   97US-0063128P.
PR   27-OCT-1997;   97US-0063327P.
PR   27-OCT-1997;   97US-0063329P.
PR   28-OCT-1997;   97US-0063541P.
PR   28-OCT-1997;   97US-0063542P.
PR   28-OCT-1997;   97US-0063544P.
PR   28-OCT-1997;   97US-0063549P.
PR   28-OCT-1997;   97US-0063550P.
PR   28-OCT-1997;   97US-0063564P.
PR   29-OCT-1997;   97US-0063435P.
PR   29-OCT-1997;   97US-0063704P.
PR   29-OCT-1997;   97US-0063732P.
PR   29-OCT-1997;   97US-0063734P.
PR   29-OCT-1997;   97US-0063735P.
PR   29-OCT-1997;   97US-0063738P.
PR   29-OCT-1997;   97US-0064215P.
PR   31-OCT-1997;   97US-0063870P.
PR   31-OCT-1997;   97US-0064103P.
PR   03-NOV-1997;   97US-0064248P.
PR   07-NOV-1997;   97US-0064809P.
PR   12-NOV-1997;   97US-0065186P.
PR   17-NOV-1997;   97US-0065846P.
PR   18-NOV-1997;   97US-0065693P.
PR   21-NOV-1997;   97US-0066120P.
PR   21-NOV-1997;   97US-0066364P.
PR   24-NOV-1997;   97US-0066453P.
PR   24-NOV-1997;   97US-0066466P.
PR   24-NOV-1997;   97US-0066511P.
PR   24-NOV-1997;   97US-0066770P.
PR   24-NOV-1997;   97US-0066772P.
PR   25-NOV-1997;   97US-0066840P.
PR   12-DEC-1997;   97US-0069425P.
PR   04-JUN-1998;   98US-0088026P.
PR   10-SEP-1998;   98US-0099803P.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98US-0100262P.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98US-0100858P.
PR   17-SEP-1998;   98WO-US019437.
PR   13-OCT-1998;   98US-0104080P.
PR   20-NOV-1998;   98US-0109304P.
PR   01-DEC-1998;   98WO-US025108.
PR   22-DEC-1998;   98US-0113296P.
PR   07-JUL-1999;   99US-0143048P.
PR   26-JUL-1999;   99US-0145698P.
PR   28-JUL-1999;   99US-0146222P.
PR   08-SEP-1999;   99WO-US020594.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   01-DEC-1999;   99WO-US028301.
PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   20-DEC-1999;   99WO-US030999.
PR   05-JAN-2000; 2000WO-US000219.
PR   11-FEB-2000; 2000WO-US003565.
PR   22-FEB-2000; 2000WO-US004414.
PR   24-FEB-2000; 2000WO-US005044.
PR   02-MAR-2000; 2000WO-US005841.
PR   20-MAR-2000; 2000WO-US007377.
PR   30-MAR-2000; 2000WO-US008439.
PR   22-MAY-2000; 2000WO-US014042.
PR   02-JUN-2000; 2000WO-US015264.
PR   28-JUL-2000; 2000WO-US020710.
PR   24-AUG-2000; 2000WO-US023328.
PR   18-SEP-2000; 2000US-00665350.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi A,  Botstein D,  Desnoyers L,  Eaton DL,  Ferrara N;
PI   Filvaroff E,  Fong S,  Gao W,  Gerber H,  Gerritsen ME,  Goddard A;
PI   Godowski PJ,  Grimaldi JC,  Gurney AL,  Hillan KJ,  Kljavin IJ;
PI   Mather JP,  Pan J,  Paoni NF,  Roy MA,  Stewart TA,  Tumas D;
PI   Williams PM,  Wood WI;
XX
```

DR WPI; 2003-765473/72.
DR P-PSDB; ADB29468.
XX
PT Novel isolated native PRO polypeptide useful for treating Parkinson's
PT disease, enterocolitis, Zollinger-Ellison syndrome gastrointestinal
PT ulceration, Alzheimer's disease, amyotrophic lateral sclerosis, Usher
PT syndrome.
XX
PS Claim 2; Fig 97; 469pp; English.
XX
CC The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. PRO polypeptides are also useful
CC for treating disorders associated with the preservation and maintenance
CC of gastrointestinal mucosa and the repair of acute and chronic mucosal
CC lesions, skin diseases associated with abnormal keratinocyte
CC differentiation (e.g. psoriasis), Parkinson's disease, Alzheimer's
CC diseases, amyotrophic lateral sclerosis (ALS), neuropathies and
CC additionally, disease related to uncontrolled cell growth, e.g. cancer.
CC PRO polypeptides also serves as tumour specific antigens which may be
CC exploited as therapeutic targets for anti-tumour drugs, and are also
CC employed therapeutically in vivo for lessening the effects of viral
CC infection. The PRO polypeptides can be also used in assays to determine
CC if it has a role in neurodegenerative diseases or their reversal, as an
CC antithrombotic agent with reduced risk for haemorrhage as compared with
CC heparin, in treating other PRO-associated disorders, in modulating
CC endometrial bleeding angiogenesis, and may also have an effect on kidney
CC tissue. PRO polypeptides and their portions affect the expression of
CC genes which have a role in apoptosis. The polynucleotides are useful in
CC molecular biology including uses as hybridisation probes for cDNA library
CC to isolate the full-length PRO cDNA or to isolate other cDNAs, in
CC chromosome and gene mapping, in the generation of antisense RNA and DNA,
CC for preparing PRO polypeptides, for generating transgenic animals or
CC knockout animals which are useful in the development and screening of
CC therapeutically useful reagents, as probes and for the genetic analysis
CC of individuals with genetic disorders as well as for recombinantly
CC expressing the protein and for chromosome identification. The proteins
CC are useful as molecular marker for protein electrophoresis purposes, as
CC therapeutic agents, for screening compounds to identify those that mimic
CC the PRO polypeptide (agonists) or prevent the effect of the PRO
CC polypeptide (antagonists). The polynucleotides and proteins are useful
CC for tissue typing. PRO antibodies are useful for immunohistochemical
CC staining and/or assay of sample fluids. Anti-PRO antibodies are useful in
CC diagnostic assays for PRO e.g. detecting its expression in specific
CC cells, tissues or serum and for affinity purification of PRO from
CC recombinant cell culture or natural sources. The PRO genes may also be
CC used in gene therapy, particularly for replacing a defective gene. The
CC sequence presented is a gene encoding a PRO polynucleotide of the
CC invention.
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

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Qy      399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
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Db      131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy      459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | ||  | ||  | | |||| || ||  | ||  ||| |
Db       71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32
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RESULT 104
ADA18323/c

ID ADA18323 standard; cDNA; 1378 BP.
XX
AC ADA18323;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human secreted/transmembrane protein cDNA, #52.
XX
KW Human; gene; ss; PRO; secreted; transmembrane; gastrointestinal mucosa;
KW mucosal lesion; skin disease; keratinocyte differentiation; psoriasis;
KW Parkinson's disease; Alzheimer's diseases; amyotrophic lateral sclerosis;
KW ALS; neuropathy; cell growth; cancer; tumour; viral infection;
KW neurodegenerative disease; antithrombotic agent; haemorrhage;
KW endometrial bleeding angiogenesis; kidney tissue; apoptosis; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy; nootropic;
KW neuroprotective; cytostatic; virucide; anticoagulant.
XX
OS Homo sapiens.
XX
PN US2003039971-A1.
XX
PD 27-FEB-2003.
XX
PF 16-JUL-2001; 2001US-00906646.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.

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PR   24-NOV-1997;   97US-0066772P.
PR   25-NOV-1997;   97US-0066840P.
PR   12-DEC-1997;   97US-0069425P.
PR   04-JUN-1998;   98US-0088026P.
PR   10-SEP-1998;   98US-0099803P.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98US-0100262P.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98US-0100858P.
PR   17-SEP-1998;   98WO-US019437.
PR   13-OCT-1998;   98US-0104080P.
PR   20-NOV-1998;   98US-0109304P.
PR   01-DEC-1998;   98WO-US025108.
PR   22-DEC-1998;   98US-0113296P.
PR   07-JUL-1999;   99US-0143048P.
PR   26-JUL-1999;   99US-0145698P.
PR   28-JUL-1999;   99US-0146222P.
PR   08-SEP-1999;   99WO-US020594.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   01-DEC-1999;   99WO-US028301.
PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   20-DEC-1999;   99WO-US030999.
PR   05-JAN-2000; 2000WO-US000219.
PR   11-FEB-2000; 2000WO-US003565.
PR   22-FEB-2000; 2000WO-US004414.
PR   24-FEB-2000; 2000WO-US005004.
PR   02-MAR-2000; 2000WO-US005841.
PR   20-MAR-2000; 2000WO-US007377.
PR   30-MAR-2000; 2000WO-US008439.
PR   22-MAY-2000; 2000WO-US014042.
PR   02-JUN-2000; 2000WO-US015264.
PR   28-JUL-2000; 2000WO-US020710.
PR   24-AUG-2000; 2000WO-US023328.
PR   18-SEP-2000; 2000US-00665350.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi A,  Botstein D,  Desnoyers L,  Eaton DL,  Ferrara N;
PI   Filvaroff E,  Fong S,  Gao W,  Gerber H,  Gerritsen ME,  Goddard A;
PI   Godowski PJ,  Grimaldi JC,  Gurney AL,  Hillan KJ,  Kljavin IJ;
PI   Mather JP,  Pan J,  Paoni NF,  Roy MA,  Stewart TA,  Tumas D;
PI   Williams PM,  Wood WI;
XX
DR   WPI; 2003-503392/47.
DR   P-PSDB; ADA18324.
XX
PT   New secreted and transmembrane polypeptides useful for treating skin,
PT   neurodegenerative diseases, asthma, rheumatoid arthritis, psoriasis and
PT   multiple sclerosis.
XX
PS   Claim 2; SEQ ID NO 262; 471pp; English.
XX
CC   The invention discloses isolated PRO secreted/transmembrane polypeptides
CC   and the nucleic acid encoding them. The polypeptides can be used to raise
CC   antibodies that specifically bind to the PRO polypeptide, for linking a
CC   bioactive molecule to a cell expressing a PRO protein and for modulating
CC   at least one biological activity of a cell. PRO polypeptides are useful
CC   for detecting other PRO polypeptides in a sample and for linking a
CC   bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC   polypeptide antibodies are useful for modulating the biological activity
CC   of a cell expressing PRO polypeptides. PRO polypeptides are also useful
CC   for treating disorders associated with the preservation and maintenance
CC   of gastrointestinal mucosa and the repair of acute and chronic mucosal
CC   lesions, skin diseases associated with abnormal keratinocyte
CC   differentiation (e.g. psoriasis), Parkinson's disease, Alzheimer's
CC   diseases, amyotrophic lateral sclerosis (ALS), neuropathies and
CC   additionally, disease related to uncontrolled cell growth, e.g. cancer.
CC   PRO polypeptides also serves as tumour specific antigens which may be
CC   exploited as therapeutic targets for anti-tumour drugs, and are also
CC   employed therapeutically in vivo for lessening the effects of viral
CC   infection. The PRO polypeptides can be also used in assays to determine
CC   if it has a role in neurodegenerative diseases or their reversal, as an
CC   antithrombotic agent with reduced risk for haemorrhage as compared with
CC   heparin, in treating other PRO-associated disorders, in modulating
CC   endometrial bleeding angiogenesis, and may also have an effect on kidney
CC   tissue. PRO polypeptides and their portions affect the expression of
CC   genes which have a role in apoptosis. The polynucleotides are useful in
CC   molecular biology including uses as hybridisation probes for cDNA library
CC   to isolate the full-length PRO cDNA or to isolate other cDNAs, in
CC   chromosome and gene mapping, in the generation of antisense RNA and DNA,
CC   for preparing PRO polypeptides, for generating transgenic animals or
CC   knockout animals which are useful in the development and screening of
CC   therapeutically useful reagents, as probes and for the genetic analysis
CC   of individuals with genetic disorders as well as for recombinantly
CC   expressing the protein and for chromosome identification. The proteins
CC   are useful as molecular marker for protein electrophoresis purposes, as
CC   therapeutic agents, for screening compounds to identify those that mimic
CC   the PRO polypeptide (agonists) or prevent the effect of the PRO
CC   polypeptide (antagonists). The polynucleotides and proteins are useful
CC   for tissue typing. PRO antibodies are useful for immunohistochemical
CC   staining and/or assay of sample fluids. Anti-PRO antibodies are useful in
CC   diagnostic assays for PRO e.g. detecting its expression in specific
CC   cells, tissues or serum and for affinity purification of PRO from
CC   recombinant cell culture or natural sources. The PRO genes may also be
CC   used in gene therapy, particularly for replacing a defective gene. The
CC   sequence presented is a gene encoding a PRO polynucleotide of the
CC   invention.
XX
SQ   Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 89;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   |  |  | | | |  | ||| |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32


RESULT 105
ACD67004/c
ID   ACD67004 standard; cDNA; 1378 BP.
XX
AC   ACD67004;
XX
DT   17-SEP-2003  (first entry)
XX
DE   Human cDNA encoding secreted/transmembrane protein PRO343.
XX
KW   Human; ss; gene; PRO; secreted and transmembrane protein; inflammation;
KW   rheumatoid arthritis; psoriasis; multiple sclerosis; atherosclerosis;
KW   infertility; birth defect; premature aging; malignancy; cancer; stroke;
KW   heart attack; hypertension; gastrointestinal ulceration;
KW   Parkinson's disease; Alzheimer's disease; AIDS; cholesterol uptake;
KW   wound healing; tissue repair; gene therapy.
XX
OS   Homo sapiens.
XX
PN   US2003045693-A1.
XX
PD   06-MAR-2003.
XX
PF   11-JUL-2001; 2001US-00903749.
```

XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-512316/48.
DR P-PSDB; AB032803.
XX
PT New genes and secreted and transmembrane polypeptides (e.g. PRO245 or
PT PRO1868), useful for treating or diagnosing e.g. cancers,
PT atherosclerosis, infertility, stroke, AIDS or multiple sclerosis in
PT mammals.
XX
PS Claim 2; Fig 97; 476pp; English.
XX
CC The invention relates to an isolated nucleic acid molecule comprising a
CC sequence with at least 80% identity to: (a) a nucleotide encoding any of
CC 61 PRO (secreted and transmembrane protein) polypeptides appearing as
CC AB032756-AB032816; or (b) any of 61 nucleotide sequences having 50-4053bp
CC fully defined in the specification; or the full length coding sequence of
CC any these 61 nucleotide sequences. Also included are the isolated PRO
CC polypeptide (lacking its associated signal peptide or an extracellular
CC domain of the PRO polypeptide, with or lacking its associated signal
CC peptide), a vector comprising the nucleic acid molecule, a host cell
CC comprising the vector (used to produce the PRO polypeptide), a chimaeric
CC molecule comprising the PRO polypeptide fused to a heterologous amino
CC acid sequence, an anti-PRO antibody, detecting PRO245 or PRO1868
CC polypeptide in a sample suspected of containing any of these PRO
CC polypeptides, linking a bioactive molecule to a cell expressing a PRO245
CC or PRO1868 polypeptide and modulating at least one biological activity of
CC a cell expressing the PRO245 or PRO1868 polypeptide. The PRO polypeptides
CC or polynucleotides are useful as pharmaceuticals, diagnostics, biosensors
CC or bioreactors. These are particularly useful for diagnosing or treating
CC e.g. inflammations, rheumatoid arthritis, psoriasis, multiple sclerosis,
CC atherosclerosis, infertility, birth defects, premature aging, malignancy
CC (e.g. cancers), strokes, heart attacks, hypertension, gastrointestinal
CC ulcerations, Parkinson's diseases, Alzheimer's disease, or AIDS in
CC mammals. These are also useful for modulating cholesterol uptake in the
CC body, and in wound healing or tissue repair. The PRO polypeptides are
CC useful in drug screening. The PRO polypeptides are also useful as
CC molecular weight markers, or for chromosome identification. The PRO genes
CC are useful as hybridisation probes, or for screening libraries of human
CC cDNA, genomic DNA or mRNA. The PRO genes may also be used in gene
CC therapy, particularly for replacing a defective gene. The present
CC sequence is a cDNA encoding a PRO polypeptide
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;

```
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   |  | | | | | | || |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32


RESULT 106
ACD83165/c
ID   ACD83165 standard; cDNA; 1378 BP.
XX
AC   ACD83165;
XX
DT   22-SEP-2003  (first entry)
XX
DE   Human PRO polynucleotide #48.
XX
KW   Human; PRO; gene; ss; secreted polypeptide; transmembrane polypeptide;
KW   abnormal bleeding; gynaecological disease; hysterectomy; mucosal lesion;
KW   coronary ischaemic condition; gastrointestinal mucosa; skin disease; ALS;
KW   keratinocyte differentiation; psoriasis; Parkinson's disease; asthma;
KW   Alzheimer's disease; rheumatoid arthritis; multiple sclerosis; cancer;
KW   amyotrophic lateral sclerosis; neuropathy; uncontrolled cell growth.
XX
OS   Homo sapiens.
XX
PN   US2003044793-A1.
XX
PD   06-MAR-2003.
XX
PF   11-JUL-2001; 2001US-00903786.
XX
PR   17-SEP-1997;   97US-0059113P.
PR   17-SEP-1997;   97US-0059115P.
PR   17-SEP-1997;   97US-0059117P.
PR   17-SEP-1997;   97US-0059119P.
PR   17-SEP-1997;   97US-0059121P.
PR   17-SEP-1997;   97US-0059122P.
PR   17-SEP-1997;   97US-0059184P.
PR   18-SEP-1997;   97US-0059263P.
PR   18-SEP-1997;   97US-0059266P.
PR   15-OCT-1997;   97US-0062125P.
PR   17-OCT-1997;   97US-0062285P.
PR   17-OCT-1997;   97US-0062287P.
PR   21-OCT-1997;   97US-0063486P.
PR   24-OCT-1997;   97US-0062814P.
PR   24-OCT-1997;   97US-0062816P.
PR   24-OCT-1997;   97US-0063045P.
PR   24-OCT-1997;   97US-0063120P.
PR   24-OCT-1997;   97US-0063121P.
PR   24-OCT-1997;   97US-0063127P.
PR   24-OCT-1997;   97US-0063128P.
PR   27-OCT-1997;   97US-0063327P.
PR   27-OCT-1997;   97US-0063329P.
PR   28-OCT-1997;   97US-0063541P.
PR   28-OCT-1997;   97US-0063542P.
PR   28-OCT-1997;   97US-0063544P.
PR   28-OCT-1997;   97US-0063549P.
PR   28-OCT-1997;   97US-0063550P.
PR   28-OCT-1997;   97US-0063564P.
PR   29-OCT-1997;   97US-0063435P.
PR   29-OCT-1997;   97US-0063704P.
PR   29-OCT-1997;   97US-0063732P.
PR   29-OCT-1997;   97US-0063734P.
PR   29-OCT-1997;   97US-0063735P.
PR   29-OCT-1997;   97US-0063738P.
PR   29-OCT-1997;   97US-0064215P.
PR   31-OCT-1997;   97US-0063870P.
PR   31-OCT-1997;   97US-0064103P.
PR   03-NOV-1997;   97US-0064248P.
PR   07-NOV-1997;   97US-0064809P.
PR   12-NOV-1997;   97US-0065186P.
PR   17-NOV-1997;   97US-0065846P.
PR   18-NOV-1997;   97US-0065693P.
PR   21-NOV-1997;   97US-0066120P.
PR   21-NOV-1997;   97US-0066364P.
PR   24-NOV-1997;   97US-0066453P.
PR   24-NOV-1997;   97US-0066466P.
PR   24-NOV-1997;   97US-0066511P.
PR   24-NOV-1997;   97US-0066770P.
PR   24-NOV-1997;   97US-0066772P.
PR   25-NOV-1997;   97US-0066840P.
PR   12-DEC-1997;   97US-0069425P.
PR   04-JUN-1998;   98US-0088026P.
PR   10-SEP-1998;   98US-0099803P.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98US-0100262P.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98US-0100858P.
PR   17-SEP-1998;   98WO-US019437.
PR   13-OCT-1998;   98US-0104080P.
PR   20-NOV-1998;   98US-0109304P.
PR   01-DEC-1998;   98WO-US025108.
PR   22-DEC-1998;   98US-0113296P.
PR   07-JUL-1999;   99US-0143048P.
PR   26-JUL-1999;   99US-0145698P.
PR   28-JUL-1999;   99US-0146222P.
PR   08-SEP-1999;   99WO-US020594.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   01-DEC-1999;   99WO-US028301.
PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   20-DEC-1999;   99WO-US030999.
PR   05-JAN-2000; 2000WO-US000219.
PR   11-FEB-2000; 2000WO-US003565.
PR   22-FEB-2000; 2000WO-US004414.
PR   24-FEB-2000; 2000WO-US005004.
PR   02-MAR-2000; 2000WO-US005841.
PR   20-MAR-2000; 2000WO-US007377.
PR   30-MAR-2000; 2000WO-US008439.
PR   22-MAY-2000; 2000WO-US014042.
PR   02-JUN-2000; 2000WO-US015264.
PR   28-JUL-2000; 2000WO-US020710.
PR   24-AUG-2000; 2000WO-US023328.
PR   18-SEP-2000; 2000US-00665350.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi A,  Botstein D,  Desnoyers L,  Eaton DL,  Ferrara N;
PI   Filvaroff E,  Fong S,  Gao W,  Gerber H,  Gerritsen ME,  Goddard A;
PI   Godowski PJ,  Grimaldi JC,  Gurney AL,  Hillan KJ,  Kljavin IJ;
PI   Mather JP,  Pan J,  Paoni NF,  Roy MA,  Stewart TA,  Tumas D;
PI   Williams PM,  Wood WI;
XX
DR   WPI; 2003-492256/46.
DR   P-PSDB; ABO34863.
XX
PT   Novel secreted and transmembrane PRO polypeptides and polynucleotides
PT   encoding them, useful for treating abnormal bleeding involved in
PT   gynecological diseases, skin diseases and neurodegenerative diseases.
XX
PS   Claim 2; Fig 97; 475pp; English.
XX
CC   The invention relates to human PRO polypeptides (secreted and
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CC   transmembrane polypeptides) and the PRO polynucleotides encoding them.
CC   The PRO polypeptides and polynucleotides can be used in diagnosing or
CC   treating abnormal bleeding involved in gynaecological diseases e.g. to
CC   avoid or lessen the need for hysterectomy. They can also be used in
CC   treating coronary ischaemic conditions, disorders associated with the
CC   preservation and maintenance of gastrointestinal mucosa and the repair of
CC   acute and chronic mucosal lesions, skin diseases associated with abnormal
CC   keratinocyte differentiation (e.g. psoriasis), Parkinson's disease,
CC   Alzheimer's disease, asthma, rheumatoid arthritis, multiple sclerosis,
CC   amyotrophic lateral sclerosis (ALS), neuropathies and diseases related to
CC   uncontrolled cell growth, such as cancer. This sequence represents a
CC   human PRO polynucleotide of the invention
XX
SQ   Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 89;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  |||||  |||   | |   |  | | | | |  | || |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32


RESULT 107
ADA16298/c
ID   ADA16298 standard; cDNA; 1378 BP.
XX
AC   ADA16298;
XX
DT   06-NOV-2003  (first entry)
XX
DE   Human secreted/transmembrane protein cDNA, #52.
XX
KW   Human; gene; ss; PRO; secreted; transmembrane; therapeutic;
KW   tissue typing; immunohistochemical staining; gene therapy;
KW   neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW   endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW   rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
KW   cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW   retinitis pigmentosum; obesity; diabete; hyperinsulinaemia;
KW   hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
KW   arthritis; cardiant; vulnerary; cytostatic; ophthalmological;
KW   osteopathic; antiarthritic; anorectic.
XX
OS   Homo sapiens.
XX
PN   US2003049621-A1.
XX
PD   13-MAR-2003.
XX
PF   11-JUL-2001; 2001US-00904119.
XX
PR   17-SEP-1997;   97US-0059113P.
PR   17-SEP-1997;   97US-0059115P.
PR   17-SEP-1997;   97US-0059117P.
PR   17-SEP-1997;   97US-0059119P.
PR   17-SEP-1997;   97US-0059121P.
PR   17-SEP-1997;   97US-0059122P.
PR   17-SEP-1997;   97US-0059184P.
PR   18-SEP-1997;   97US-0059263P.
PR   18-SEP-1997;   97US-0059266P.
PR   15-OCT-1997;   97US-0062125P.
PR   17-OCT-1997;   97US-0062285P.
PR   17-OCT-1997;   97US-0062287P.
PR   21-OCT-1997;   97US-0063486P.
PR   24-OCT-1997;   97US-0062814P.
PR   24-OCT-1997;   97US-0062816P.
PR   24-OCT-1997;   97US-0063045P.
PR   24-OCT-1997;   97US-0063120P.
PR   24-OCT-1997;   97US-0063121P.
PR   24-OCT-1997;   97US-0063127P.
PR   24-OCT-1997;   97US-0063128P.
PR   27-OCT-1997;   97US-0063327P.
PR   27-OCT-1997;   97US-0063329P.
PR   28-OCT-1997;   97US-0063541P.
PR   28-OCT-1997;   97US-0063542P.
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PR   28-OCT-1997;   97US-0063549P.
PR   28-OCT-1997;   97US-0063550P.
PR   28-OCT-1997;   97US-0063564P.
PR   29-OCT-1997;   97US-0063435P.
PR   29-OCT-1997;   97US-0063704P.
PR   29-OCT-1997;   97US-0063732P.
PR   29-OCT-1997;   97US-0063734P.
PR   29-OCT-1997;   97US-0063735P.
PR   29-OCT-1997;   97US-0063738P.
PR   29-OCT-1997;   97US-0064215P.
PR   31-OCT-1997;   97US-0063870P.
PR   31-OCT-1997;   97US-0064103P.
PR   03-NOV-1997;   97US-0064248P.
PR   07-NOV-1997;   97US-0064809P.
PR   12-NOV-1997;   97US-0065186P.
PR   17-NOV-1997;   97US-0065846P.
PR   18-NOV-1997;   97US-0065693P.
PR   21-NOV-1997;   97US-0066120P.
PR   21-NOV-1997;   97US-0066364P.
PR   24-NOV-1997;   97US-0066453P.
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PR   24-NOV-1997;   97US-0066770P.
PR   24-NOV-1997;   97US-0066772P.
PR   25-NOV-1997;   97US-0066840P.
PR   12-DEC-1997;   97US-0069425P.
PR   04-JUN-1998;   98US-0088026P.
PR   10-SEP-1998;   98US-0099803P.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98US-0100262P.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98US-0100858P.
PR   17-SEP-1998;   98WO-US019437.
PR   13-OCT-1998;   98US-0104080P.
PR   20-NOV-1998;   98US-0109304P.
PR   01-DEC-1998;   98WO-US025108.
PR   22-DEC-1998;   98US-0113296P.
PR   07-JUL-1999;   99US-0143048P.
PR   26-JUL-1999;   99US-0145698P.
PR   28-JUL-1999;   99US-0146222P.
PR   08-SEP-1999;   99WO-US020594.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   01-DEC-1999;   99WO-US028301.
PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   20-DEC-1999;   99WO-US030999.
PR   05-JAN-2000; 2000WO-US000219.
PR   11-FEB-2000; 2000WO-US003565.
PR   22-FEB-2000; 2000WO-US004414.
PR   24-FEB-2000; 2000WO-US005004.
PR   02-MAR-2000; 2000WO-US005841.
PR   20-MAR-2000; 2000WO-US007377.
PR   30-MAR-2000; 2000WO-US008439.
PR   22-MAY-2000; 2000WO-US014042.
PR   02-JUN-2000; 2000WO-US015264.
PR   28-JUL-2000; 2000WO-US020710.
```

PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-521801/49.
DR P-PSDB; ADA16299.
XX
PT New genes encoding for secreted and transmembrane PRO polypeptides,
PT useful for treating e.g. cardiac insufficiency disorders, wounds,
PT cancers, obesity, diabetes, hyperinsulinemia, hypoinsulinemia, or
PT arthritis.
XX
PS Claim 2; SEQ ID NO 262; 476pp; English.
XX
CC The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. The PRO polypeptides or
CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
CC bioreactors. These are useful for stimulating hypertrophy of neonatal
CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
CC proliferation of endothelial cells, modulating the proliferation of
CC stimulated T-lymphocytes, enhancing the survival or proliferation of
CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
CC -differentiation of chondrocytes. In particular, these are useful for
CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
CC tumours, retinal disorders or injuries (e.g. loss of sight due to
CC retinitis pigmentosum), obesity, diabetes, hyperinsulinaemia,
CC hypoinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
CC arthritis) in mammals. PRO polypeptides and their portions affect the
CC expression of genes which have a role in cell death. The polynucleotides
CC are useful in molecular biology including uses as hybridisation probes
CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
CC and DNA, for preparing PRO polypeptides, for generating transgenic
CC animals or knockout animals which are useful in the development and
CC screening of therapeutically useful reagents, as probes and for the
CC genetic analysis of individuals with genetic disorders as well as for
CC recombinantly expressing the protein and for chromosome identification.
CC The proteins are useful as molecular marker for protein electrophoresis
CC purposes, as therapeutic agents, for screening compounds to identify
CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
CC useful for tissue typing. PRO antibodies are useful for
CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
CC expression in specific cells, tissues or serum and for affinity
CC purification of PRO from recombinant cell culture or natural sources. The
CC PRO genes may also be used in gene therapy, particularly for replacing a
CC defective gene. The sequence presented is a gene encoding a PRO
CC polynucleotide of the invention.
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

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Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
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Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32
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RESULT 108
ADA42443/c
ID ADA42443 standard; cDNA; 1378 BP.
XX
AC ADA42443;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human secreted/transmembrane protein cDNA, #52.
XX
KW Human; gene; ss; PRO; secreted; transmembrane; gastrointestinal mucosa;
KW mucosal lesion; skin disease; keratinocyte differentiation; psoriasis;
KW Parkinson's disease; Alzheimer's diseases; amyotrophic lateral sclerosis;
KW ALS; neuropathy; cell growth; cancer; tumour; viral infection;
KW neurodegenerative disease; antithrombotic agent; haemorrhage;
KW endometrial bleeding angiogenesis; kidney tissue; apoptosis; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy; nootropic;
KW neuroprotective; cytostatic; virucide; anticoagulant.
XX
OS Homo sapiens.
XX
PN US2003054401-A1.
XX
PD 20-MAR-2003.
XX
PF 11-JUL-2001; 2001US-00903520.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
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PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.

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PR   12-NOV-1997;   97US-0065186P.
PR   17-NOV-1997;   97US-0065846P.
PR   18-NOV-1997;   97US-0065693P.
PR   21-NOV-1997;   97US-0066120P.
PR   21-NOV-1997;   97US-0066364P.
PR   24-NOV-1997;   97US-0066453P.
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PR   24-NOV-1997;   97US-0066770P.
PR   24-NOV-1997;   97US-0066772P.
PR   25-NOV-1997;   97US-0066840P.
PR   12-DEC-1997;   97US-0069425P.
PR   04-JUN-1998;   98US-0088026P.
PR   10-SEP-1998;   98US-0099803P.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98US-0100262P.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98US-0100858P.
PR   17-SEP-1998;   98WO-US019437.
PR   13-OCT-1998;   98US-0104080P.
PR   20-NOV-1998;   98US-0109304P.
PR   01-DEC-1998;   98WO-US025108.
PR   22-DEC-1998;   98US-0113296P.
PR   07-JUL-1999;   99US-0143048P.
PR   26-JUL-1999;   99US-0145698P.
PR   28-JUL-1999;   99US-0146222P.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   01-DEC-1999;   99WO-US028301.
PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
PR   08-DEC-1999;   99WO-US020594.
PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   20-DEC-1999;   99WO-US030999.
PR   05-JAN-2000; 2000WO-US000219.
PR   11-FEB-2000; 2000WO-US003565.
PR   22-FEB-2000; 2000WO-US004414.
PR   24-FEB-2000; 2000WO-US005004.
PR   02-MAR-2000; 2000WO-US005841.
PR   20-MAR-2000; 2000WO-US007377.
PR   30-MAR-2000; 2000WO-US008439.
PR   22-MAY-2000; 2000WO-US014042.
PR   02-JUN-2000; 2000WO-US015264.
PR   28-JUL-2000; 2000WO-US020710.
PR   24-AUG-2000; 2000WO-US023328.
PR   18-SEP-2000; 2000US-00665350.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi A,  Botstein D,  Desnoyers L,  Eaton DL,  Ferrara N;
PI   Filvaroff E,  Fong S,  Gao W,  Gerber H,  Gerritsen ME,  Goddard A;
PI   Godowski PJ,  Grimaldi JC,  Gurney AL,  Hillan KJ,  Kljavin IJ;
PI   Mather JP,  Pan J,  Paoni NF,  Roy MA,  Stewart TA,  Tumas D;
PI   Williams PM,  Wood WI;
XX
DR   WPI; 2003-755054/71.
DR   P-PSDB; ADA42444.
XX
PT   Novel PRO polypeptides useful for treating Parkinson's disease,
PT   Alzheimer's disease, enterocolitis, Zollinger-Ellison syndrome,
PT   psoriasis, epidermoid carcinoma of the vulva and gliomas, gynecological
PT   diseases.
XX
PS   Claim 2; SEQ ID NO 262; 479pp; English.
XX
CC   The invention discloses isolated PRO secreted/transmembrane polypeptides
CC   and the nucleic acid encoding them. The polypeptides can be used to raise
CC   antibodies that specifically bind to the PRO polypeptide, for linking a
CC   bioactive molecule to a cell expressing a PRO protein and for modulating
CC   at least one biological activity of a cell. PRO polypeptides are useful
CC   for detecting other PRO polypeptides in a sample and for linking a
CC   bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC   polypeptide antibodies are useful for modulating the biological activity
CC   of a cell expressing PRO polypeptides. PRO polypeptides are also useful
CC   for treating disorders associated with the preservation and maintenance
CC   of gastrointestinal mucosa and the repair of acute and chronic mucosal
CC   lesions, skin diseases associated with abnormal keratinocyte
CC   differentiation (e.g. psoriasis), Parkinson's disease, Alzheimer's
CC   diseases, amyotrophic lateral sclerosis (ALS), neuropathies and
CC   additionally, disease related to uncontrolled cell growth, e.g. cancer.
CC   PRO polypeptides also serves as tumour specific antigens which may be
CC   exploited as therapeutic targets for anti-tumour drugs, and are also
CC   employed therapeutically in vivo for lessening the effects of viral
CC   infection. The PRO polypeptides can be also used in assays to determine
CC   if it has a role in neurodegenerative diseases or their reversal, as an
CC   antithrombotic agent with reduced risk for haemorrhage as compared with
CC   heparin, in treating other PRO-associated disorders, in modulating
CC   endometrial bleeding angiogenesis, and may also have an effect on kidney
CC   tissue. PRO polypeptides and their portions affect the expression of
CC   genes which have a role in apoptosis. The polynucleotides are useful in
CC   molecular biology including uses as hybridisation probes for cDNA library
CC   to isolate the full-length PRO cDNA or to isolate other cDNAs, in
CC   chromosome and gene mapping, in the generation of antisense RNA and DNA,
CC   for preparing PRO polypeptides, for generating transgenic animals or
CC   knockout animals which are useful in the development and screening of
CC   therapeutically useful reagents, as probes and for the genetic analysis
CC   of individuals with genetic disorders as well as for recombinantly
CC   expressing the protein and for chromosome identification. The proteins
CC   are useful as molecular marker for protein electrophoresis purposes, as
CC   therapeutic agents, for screening compounds to identify those that mimic
CC   the PRO polypeptide (agonists) or prevent the effect of the PRO
CC   polypeptide (antagonists). The polynucleotides and proteins are useful
CC   for tissue typing. PRO antibodies are useful for immunohistochemical
CC   staining and/or assay of sample fluids. Anti-PRO antibodies are useful in
CC   diagnostic assays for PRO e.g. detecting its expression in specific
CC   cells, tissues or serum and for affinity purification of PRO from
CC   recombinant cell culture or natural sources. The PRO genes may also be
CC   used in gene therapy, particularly for replacing a defective gene. The
CC   sequence presented is a gene encoding a PRO polynucleotide of the
CC   invention.
XX
SQ   Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 89;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   |  |  | | | | | | || |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
                  | |   | ||  |  | |||| || ||  | ||  ||| | |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32


RESULT 109
ACD23343/c
ID   ACD23343 standard; cDNA; 1378 BP.
XX
AC   ACD23343;
XX
DT   26-AUG-2003  (first entry)
XX
DE   Human PRO polynucleotide #48.
XX
KW   Human; PRO; gene; ss; Parkinson's disease; Alzheimer's disease; ALS;
KW   amyotrophic lateral sclerosis; neuropathy; cancer; viral infection; AIDS;
KW   Usher's syndrome; haemorrhage; enterocolitis; Zollinger-Ellison syndrome;
KW   gastrointestinal ulceration; congenital microvillus atrophy; psoriasis;
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KW skin disease; endometrial bleeding; angiogenesis; ischaemic condition;
KW asthma; rheumatoid arthritis; multiple sclerosis; inflammatory disease;
KW atherosclerosis; infertility; birth defect; premature aging; stroke;
KW diabetic complication.
XX
OS Homo sapiens.
XX
PN US2003064367-A1.
XX
PD 03-APR-2003.
XX
PF 13-JUL-2001; 2001US-00904485.
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PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
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PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-567176/53.
DR P-PSDB; ABO17541.
XX
PT Novel isolated PRO polypeptides e.g. PRO245 and PRO1868, useful for
PT treating e.g. Parkinson's disease, Alzheimer's disease, amyotrophic
PT lateral sclerosis, cancer, neuropathies, diabetes and psoriasis.
XX
PS Claim 2; Fig 97; 477pp; English.
XX
CC The invention relates to human PRO polypeptides and the polynucleotides
CC encoding them. The polypeptides and polynucleotides are used for treating
CC diseases related to growth or survival of nerve cells such as Parkinson's
CC disease, Alzheimer's disease, amyotrophic lateral sclerosis (ALS) and
CC neuropathies, diseases related to uncontrolled cell growth such as
CC cancer, viral infections, Usher's syndrome, haemorrhage, enterocolitis,
CC Zollinger-Ellison syndrome, gastrointestinal ulceration, congenital
CC microvillus atrophy, skin diseases such as psoriasis and epithelial
CC cancers, endometrial bleeding, angiogenesis, ischaemic conditions,
CC asthma, rheumatoid arthritis, multiple sclerosis, inflammatory diseases,
CC atherosclerosis, cardiac injury, infertility, birth defects, premature
CC aging, AIDS, stroke and diabetic complications. The polynucleotides are
CC also useful in chromosome and gene mapping. This sequence represents a
CC human PRO polynucleotide of the invention
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

Qy 399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
Db 131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

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Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
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Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32
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RESULT 110
ADA16722/c
ID ADA16722 standard; cDNA; 1378 BP.
XX
AC ADA16722;
XX
DT 06-NOV-2003 (first entry)
XX
DE Human secreted/transmembrane protein cDNA, #52.
XX
KW Human; gene; ss; PRO; secreted; transmembrane; gastrointestinal mucosa;
KW mucosal lesion; skin disease; keratinocyte differentiation; psoriasis;
KW Parkinson's disease; Alzheimer's diseases; amyotrophic lateral sclerosis;
KW ALS; neuropathy; cell growth; cancer; tumour; viral infection;
KW neurodegenerative disease; antithrombotic agent; haemorrhage;
KW endometrial bleeding angiogenesis; kidney tissue; apoptosis; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy; nootropic;
KW neuroprotective; cytostatic; virucide; anticoagulant.
XX
OS Homo sapiens.
XX
PN US2003039969-A1.
XX
PD 27-FEB-2003.
XX
PF 12-JUL-2001; 2001US-00904786.
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PR 17-SEP-1997; 97US-0059113P.
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PR 17-SEP-1997; 97US-0059117P.
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PR 18-SEP-1997; 97US-0059263P.
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PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
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PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
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PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
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PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US020944.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-503391/47.
DR P-PSDB; ADA16723.
XX
PT New secreted and transmembrane PRO polypeptides e.g. PRO187, which is a
PT member of the epidermal growth factor-8 (EGF-8) family of proteins,
PT useful for treating cancer.
XX
PS Claim 2; SEQ ID NO 262; 471pp; English.
XX
CC The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating

CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. PRO polypeptides are also useful
CC for treating disorders associated with the preservation and maintenance
CC of gastrointestinal mucosa and the repair of acute and chronic mucosal
CC lesions, skin diseases associated with abnormal keratinocyte
CC differentiation (e.g. psoriasis), Parkinson's disease, Alzheimer's
CC diseases, amyotrophic lateral sclerosis (ALS), neuropathies and
CC additionally, disease related to uncontrolled cell growth, e.g. cancer.
CC PRO polypeptides also serves as tumour specific antigens which may be
CC exploited as therapeutic targets for anti-tumour drugs, and are also
CC employed therapeutically in vivo for lessening the effects of viral
CC infection. The PRO polypeptides can be also used in assays to determine
CC if it has a role in neurodegenerative diseases or their reversal, as an
CC antithrombotic agent with reduced risk for haemorrhage as compared with
CC heparin, in treating other PRO-associated disorders, in modulating
CC endometrial bleeding angiogenesis, and may also have an effect on kidney
CC tissue. PRO polypeptides and their portions affect the expression of
CC genes which have a role in apoptosis. The polynucleotides are useful in
CC molecular biology including uses as hybridisation probes for cDNA library
CC to isolate the full-length PRO cDNA or to isolate other cDNAs, in
CC chromosome and gene mapping, in the generation of antisense RNA and DNA,
CC for preparing PRO polypeptides, for generating transgenic animals or
CC knockout animals which are useful in the development and screening of
CC therapeutically useful reagents, as probes and for the genetic analysis
CC of individuals with genetic disorders as well as for recombinantly
CC expressing the protein and for chromosome identification. The proteins
CC are useful as molecular marker for protein electrophoresis purposes, as
CC therapeutic agents, for screening compounds to identify those that mimic
CC the PRO polypeptide (agonists) or prevent the effect of the PRO
CC polypeptide (antagonists). The polynucleotides and proteins are useful
CC for tissue typing. PRO antibodies are useful for immunohistochemical
CC staining and/or assay of sample fluids. Anti-PRO antibodies are useful in
CC diagnostic assays for PRO e.g. detecting its expression in specific
CC cells, tissues or serum and for affinity purification of PRO from
CC recombinant cell culture or natural sources. The PRO genes may also be
CC used in gene therapy, particularly for replacing a defective gene. The
CC sequence presented is a gene encoding a PRO polynucleotide of the
CC invention.
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

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Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
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Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32
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RESULT 111
ADA13151/c
ID ADA13151 standard; cDNA; 1378 BP.
XX
AC ADA13151;
XX
DT 06-NOV-2003 (first entry)
XX
DE Human secreted/transmembrane protein cDNA, #52.
XX
KW Human; gene; ss; PRO; secreted; transmembrane; gastrointestinal mucosa;
KW mucosal lesion; skin disease; keratinocyte differentiation; psoriasis;
KW Parkinson's disease; Alzheimer's diseases; amyotrophic lateral sclerosis;
KW ALS; neuropathy; cell growth; cancer; tumour; viral infection;
KW neurodegenerative disease; antithrombotic agent; haemorrhage;
KW endometrial bleeding angiogenesis; kidney tissue; apoptosis; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy; nootropic;
KW neuroprotective; cytostatic; virucide; anticoagulant.
XX
OS Homo sapiens.
XX
PN US2003049622-A1.
XX
PD 13-MAR-2003.
XX
PF 14-JUL-2001; 2001US-00904956.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.

PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AJ, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-521802/49.
DR P-PSDB; ADA13152.
XX
PT New secreted and transmembrane PRO polypeptides, useful for treating
PT cancer, skin disorders, neurodegenerative diseases, and for lessening the
PT effects of viral infection.
XX
PS Claim 2; SEQ ID NO 262; 473pp; English.
XX
CC The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. PRO polypeptides are also useful
CC for treating disorders associated with the preservation and maintenance
CC of gastrointestinal mucosa and the repair of acute and chronic mucosal
CC lesions, skin diseases associated with abnormal keratinocyte
CC differentiation (e.g. psoriasis), Parkinson's disease, Alzheimer's
CC diseases, amyotrophic lateral sclerosis (ALS), neuropathies and
CC additionally, disease related to uncontrolled cell growth, e.g. cancer.
CC PRO polypeptides also serves as tumour specific antigens which may be
CC exploited as therapeutic targets for anti-tumour drugs, and are also
CC employed therapeutically in vivo for lessening the effects of viral
CC infection. The PRO polypeptides can be also used in assays to determine
CC if it has a role in neurodegenerative diseases or their reversal, as an
CC antithrombotic agent with reduced risk for haemorrhage as compared with
CC heparin, in treating other PRO-associated disorders, in modulating
CC endometrial bleeding angiogenesis, and may also have an effect on kidney
CC tissue. PRO polypeptides and their portions affect the expression of
CC genes which have a role in apoptosis. The polynucleotides are useful in
CC molecular biology including uses as hybridisation probes for cDNA library
CC to isolate the full-length PRO cDNA or to isolate other cDNAs, in
CC chromosome and gene mapping, in the generation of antisense RNA and DNA,
CC for preparing PRO polypeptides, for generating transgenic animals or
CC knockout animals which are useful in the development and screening of
CC therapeutically useful reagents, as probes and for the genetic analysis
CC of individuals with genetic disorders as well as for recombinantly
CC expressing the protein and for chromosome identification. The proteins
CC are useful as molecular marker for protein electrophoresis purposes, as
CC therapeutic agents, for screening compounds to identify those that mimic
CC the PRO polypeptide (agonists) or prevent the effect of the PRO
CC polypeptide (antagonists). The polynucleotides and proteins are useful
CC for tissue typing. PRO antibodies are useful for immunohistochemical
CC staining and/or assay of sample fluids. Anti-PRO antibodies are useful in
CC diagnostic assays for PRO e.g. detecting its expression in specific
CC cells, tissues or serum and for affinity purification of PRO from
CC recombinant cell culture or natural sources. The PRO genes may also be
CC used in gene therapy, particularly for replacing a defective gene. The
CC sequence presented is a gene encoding a PRO polynucleotide of the
CC invention.
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

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Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||  | |   |  | | | | |  | ||| |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
                  |  |  ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32
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RESULT 112
ADA42019/c
ID ADA42019 standard; cDNA; 1378 BP.
XX
AC ADA42019;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human secreted/transmembrane protein cDNA, #52.
XX
KW Human; gene; ss; PRO; secreted; transmembrane; gastrointestinal mucosa;
KW mucosal lesion; skin disease; keratinocyte differentiation; psoriasis;
KW Parkinson's disease; Alzheimer's diseases; amyotrophic lateral sclerosis;
KW ALS; neuropathy; cell growth; cancer; tumour; viral infection;
KW neurodegenerative disease; antithrombotic agent; haemorrhage;
KW endometrial bleeding angiogenesis; kidney tissue; apoptosis; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy; nootropic;
KW neuroprotective; cytostatic; virucide; anticoagulant.
XX
OS Homo sapiens.
XX
PN US2003082540-A1.
XX
PD 01-MAY-2003.
XX
PF 10-JUL-2001; 2001US-00902634.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.

PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
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PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
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PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
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PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-755103/71.
DR P-PSDB; ADA42020.
XX
PT New PRO polypeptides useful for treating Parkinson's disease,
PT enterocolitis, Zollinger-Ellison syndrome gastrointestinal ulceration,
PT Alzheimer's disease, amyotrophic lateral sclerosis and Usher syndrome.
XX
PS Claim 2; SEQ ID NO 262; 468pp; English.
XX
CC The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. PRO polypeptides are also useful
CC for treating disorders associated with the preservation and maintenance
CC of gastrointestinal mucosa and the repair of acute and chronic mucosal
CC lesions, skin diseases associated with abnormal keratinocyte
CC differentiation (e.g. psoriasis), Parkinson's disease, Alzheimer's
CC diseases, amyotrophic lateral sclerosis (ALS), neuropathies and
CC additionally, disease related to uncontrolled cell growth, e.g. cancer.
CC PRO polypeptides also serves as tumour specific antigens which may be
CC exploited as therapeutic targets for anti-tumour drugs, and are also
CC employed therapeutically in vivo for lessening the effects of viral
CC infection. The PRO polypeptides can be also used in assays to determine
CC if it has a role in neurodegenerative diseases or their reversal, as an
CC antithrombotic agent with reduced risk for haemorrhage as compared with
CC heparin, in treating other PRO-asscciated disorders, in modulating
CC endometrial bleeding angiogenesis, and may also have an effect on kidney
CC tissue. PRO polypeptides and their portions affect the expression of
CC genes which have a role in apoptosis. The polynucleotides are useful in
CC molecular biology including uses as hybridisation probes for cDNA library
CC to isolate the full-length PRO cDNA or to isolate other cDNAs, in
CC chromosome and gene mapping, in the generation of antisense RNA and DNA,
CC for preparing PRO polypeptides, for generating transgenic animals or
CC knockout animals which are useful in the development and screening of
CC therapeutically useful reagents, as probes and for the genetic analysis
CC of individuals with genetic disorders as well as for recombinantly
CC expressing the protein and for chromosome identification. The proteins
CC are useful as molecular marker for protein electrophoresis purposes, as
CC therapeutic agents, for screening compounds to identify those that mimic
CC the PRO polypeptide (agonists) or prevent the effect of the PRO
CC polypeptide (antagonists). The polynucleotides and proteins are useful
CC for tissue typing. PRO antibodies are useful for immunohistochemical
CC staining and/or assay of sample fluids. Anti-PRO antibodies are useful in
CC diagnostic assays for PRO e.g. detecting its expression in specific
CC cells, tissues or serum and for affinity purification of PRO from
CC recombinant cell culture or natural sources. The PRO genes may also be
CC used in gene therapy, particularly for replacing a defective gene. The
CC sequence presented is a gene encoding a PRO polynucleotide of the
CC invention.
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

```
  Query Match             0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 89;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   | | | | | | | |||  |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32


RESULT 113
ADA17366/c
ID   ADA17366 standard; cDNA; 1378 BP.
XX
AC   ADA17366;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Human secreted/transmembrane protein cDNA, #52.
XX
KW   Human; gene; ss; PRO; secreted; transmembrane; gastrointestinal mucosa;
KW   mucosal lesion; skin disease; keratinocyte differentiation; psoriasis;
KW   Parkinson's disease; Alzheimer's diseases; amyotrophic lateral sclerosis;
KW   ALS; neuropathy; cell growth; cancer; tumour; viral infection;
KW   neurodegenerative disease; antithrombotic agent; haemorrhage;
KW   endometrial bleeding angiogenesis; kidney tissue; apoptosis; therapeutic;
KW   tissue typing; immunohistochemical staining; gene therapy; nootropic;
KW   neuroprotective; cytostatic; virucide; anticoagulant.
XX
OS   Homo sapiens.
XX
PN   US2003017498-A1.
XX
PD   23-JAN-2003.
XX
PF   17-JUL-2001; 2001US-00908093.
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PR   17-SEP-1997;   97US-0059113P.
PR   17-SEP-1997;   97US-0059115P.
PR   17-SEP-1997;   97US-0059117P.
PR   17-SEP-1997;   97US-0059119P.
PR   17-SEP-1997;   97US-0059121P.
PR   17-SEP-1997;   97US-0059122P.
PR   17-SEP-1997;   97US-0059184P.
PR   18-SEP-1997;   97US-0059263P.
PR   18-SEP-1997;   97US-0059266P.
PR   15-OCT-1997;   97US-0062125P.
PR   17-OCT-1997;   97US-0062285P.
PR   17-OCT-1997;   97US-0062287P.
PR   21-OCT-1997;   97US-0063486P.
PR   24-OCT-1997;   97US-0062814P.
PR   24-OCT-1997;   97US-0062816P.
PR   24-OCT-1997;   97US-0063045P.
PR   24-OCT-1997;   97US-0063120P.
PR   24-OCT-1997;   97US-0063121P.
PR   24-OCT-1997;   97US-0063127P.
PR   24-OCT-1997;   97US-0063128P.
PR   27-OCT-1997;   97US-0063327P.
PR   27-OCT-1997;   97US-0063329P.
PR   28-OCT-1997;   97US-0063541P.
PR   28-OCT-1997;   97US-0063542P.
PR   28-OCT-1997;   97US-0063544P.
PR   28-OCT-1997;   97US-0063549P.
PR   28-OCT-1997;   97US-0063550P.
PR   28-OCT-1997;   97US-0063564P.
PR   29-OCT-1997;   97US-0063435P.
PR   29-OCT-1997;   97US-0063704P.
PR   29-OCT-1997;   97US-0063732P.
PR   29-OCT-1997;   97US-0063734P.
PR   29-OCT-1997;   97US-0063735P.
PR   29-OCT-1997;   97US-0063738P.
PR   29-OCT-1997;   97US-0064215P.
PR   31-OCT-1997;   97US-0063870P.
PR   31-OCT-1997;   97US-0064103P.
PR   03-NOV-1997;   97US-0064248P.
PR   07-NOV-1997;   97US-0064809P.
PR   12-NOV-1997;   97US-0065186P.
PR   17-NOV-1997;   97US-0065846P.
PR   18-NOV-1997;   97US-0065693P.
PR   21-NOV-1997;   97US-0066120P.
PR   21-NOV-1997;   97US-0066364P.
PR   24-NOV-1997;   97US-0066453P.
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PR   24-NOV-1997;   97US-0066511P.
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PR   24-NOV-1997;   97US-0066772P.
PR   25-NOV-1997;   97US-0066840P.
PR   12-DEC-1997;   97US-0069425P.
PR   04-JUN-1998;   98US-0088026P.
PR   10-SEP-1998;   98US-0099803P.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98US-0100262P.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98US-0100858P.
PR   17-SEP-1998;   98WO-US019437.
PR   13-OCT-1998;   98US-0104080P.
PR   20-NOV-1998;   98US-0109304P.
PR   01-DEC-1998;   98WO-US025108.
PR   22-DEC-1998;   98US-0113296P.
PR   07-JUL-1999;   99US-0143048P.
PR   26-JUL-1999;   99US-0145698P.
PR   28-JUL-1999;   99US-0146222P.
PR   08-SEP-1999;   99WO-US020594.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   01-DEC-1999;   99WO-US028301.
PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   20-DEC-1999;   99WO-US030999.
PR   05-JAN-2000; 2000WO-US000219.
PR   11-FEB-2000; 2000WO-US003565.
PR   22-FEB-2000; 2000WO-US004414.
PR   24-FEB-2000; 2000WO-US005004.
PR   02-MAR-2000; 2000WO-US005841.
PR   20-MAR-2000; 2000WO-US007377.
PR   30-MAR-2000; 2000WO-US008439.
PR   22-MAY-2000; 2000WO-US014042.
PR   02-JUN-2000; 2000WO-US015264.
PR   28-JUL-2000; 2000WO-US020710.
PR   24-AUG-2000; 2000WO-US023328.
PR   18-SEP-2000; 2000US-00665350.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi A,  Botstein D,  Desnoyers L,  Eaton DL,  Ferrara N;
PI   Filvaroff E,  Fong S,  Gao W,  Gerber H,  Gerritsen ME,  Goddard A;
PI   Godowski PJ,  Grimaldi JC,  Gurney AL,  Hillan KJ,  Kljavin IJ;
PI   Mather JP,  Pan J,  Paoni NF,  Roy MA,  Stewart TA,  Tumas D;
PI   Williams PM,  Wood WI;
XX
DR   WPI; 2003-531434/50.
DR   P-PSDB; ADA17367.
XX
PT   New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO245 or
PT   PRO1868, useful in molecular biology, chromosome and gene mapping, in
PT   generating antisense RNA and DNA, and in gene therapy.
```

XX
PS Claim 2; SEQ ID NO 262; 475pp; English.
XX
CC The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. PRO polypeptides are also useful
CC for treating disorders associated with the preservation and maintenance
CC of gastrointestinal mucosa and the repair of acute and chronic mucosal
CC lesions, skin diseases associated with abnormal keratinocyte
CC differentiation (e.g. psoriasis), Parkinson's disease, Alzheimer's
CC diseases, amyotrophic lateral sclerosis (ALS), neuropathies and
CC additionally, disease related to uncontrolled cell growth, e.g. cancer.
CC PRO polypeptides also serves as tumour specific antigens which may be
CC exploited as therapeutic targets for anti-tumour drugs, and are also
CC employed therapeutically in vivo for lessening the effects of viral
CC infection. The PRO polypeptides can be also used in assays to determine
CC if it has a role in neurodegenerative diseases or their reversal, as an
CC antithrombotic agent with reduced risk for haemorrhage as compared with
CC heparin, in treating other PRO-associated disorders, in modulating
CC endometrial bleeding angiogenesis, and may also have an effect on kidney
CC tissue. PRO polypeptides and their portions affect the expression of
CC genes which have a role in apoptosis. The polynucleotides are useful in
CC molecular biology including uses as hybridisation probes for cDNA library
CC to isolate the full-length PRO cDNA or to isolate other cDNAs, in
CC chromosome and gene mapping, in the generation of antisense RNA and DNA,
CC for preparing PRO polypeptides, for generating transgenic animals or
CC knockout animals which are useful in the development and screening of
CC therapeutically useful reagents, as probes and for the genetic analysis
CC of individuals with genetic disorders as well as for recombinantly
CC expressing the protein and for chromosome identification. The proteins
CC are useful as molecular marker for protein electrophoresis purposes, as
CC therapeutic agents, for screening compounds to identify those that mimic
CC the PRO polypeptide (agonists) or prevent the effect of the PRO
CC polypeptide (antagonists). The polynucleotides and proteins are useful
CC for tissue typing. PRO antibodies are useful for immunohistochemical
CC staining and/or assay of sample fluids. Anti-PRO antibodies are useful in
CC diagnostic assays for PRO e.g. detecting its expression in specific
CC cells, tissues or serum and for affinity purification of PRO from
CC recombinant cell culture or natural sources. The PRO genes may also be
CC used in gene therapy, particularly for replacing a defective gene. The
CC sequence presented is a gene encoding a PRO polynucleotide of the
CC invention.
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

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Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
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Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
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Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32
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RESULT 114
ADA42869/c
ID ADA42869 standard; cDNA; 1378 BP.
XX
AC ADA42869;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human secreted/transmembrane protein cDNA, #52.
XX
KW Human; gene; ss; PRO; secreted; transmembrane; gastrointestinal mucosa;
KW mucosal lesion; skin disease; keratinocyte differentiation; psoriasis;
KW Parkinson's disease; Alzheimer's diseases; amyotrophic lateral sclerosis;
KW ALS; neuropathy; cell growth; cancer; tumour; viral infection;
KW neurodegenerative disease; antithrombotic agent; haemorrhage;
KW endometrial bleeding angiogenesis; kidney tissue; apoptosis; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy; nootropic;
KW neuroprotective; cytostatic; virucide; anticoagulant.
XX
OS Homo sapiens.
XX
PN US2003054351-A1.
XX
PD 20-MAR-2003.
XX
PF 13-JUL-2001; 2001US-00904462.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.

PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-755052/71.
DR P-PSDB; ADA42870.
XX
PT Novel isolated secreted and transmembrane PRO polypeptide, useful for
PT tissue typing, treating Parkinson's disease, Alzheimer's disease, birth
PT defects, cancer.
XX
PS Claim 2; SEQ ID NO 262; 464pp; English.
XX
CC The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. PRO polypeptides are also useful
CC for treating disorders associated with the preservation and maintenance
CC of gastrointestinal mucosa and the repair of acute and chronic mucosal
CC lesions, skin diseases associated with abnormal keratinocyte
CC differentiation (e.g. psoriasis), Parkinson's disease, Alzheimer's
CC diseases, amyotrophic lateral sclerosis (ALS), neuropathies and
CC additionally, disease related to uncontrolled cell growth, e.g. cancer.
CC PRO polypeptides also serves as tumour specific antigens which may be
CC exploited as therapeutic targets for anti-tumour drugs, and are also
CC employed therapeutically in vivo for lessening the effects of viral
CC infection. The PRO polypeptides can be also used in assays to determine
CC if it has a role in neurodegenerative diseases or their reversal, as an
CC antithrombotic agent with reduced risk for haemorrhage as compared with
CC heparin, in treating other PRO-associated disorders, in modulating
CC endometrial bleeding angiogenesis, and may also have an effect on kidney
CC tissue. PRO polypeptides and their portions affect the expression of
CC genes which have a role in apoptosis. The polynucleotides are useful in
CC molecular biology including uses as hybridisation probes for cDNA library
CC to isolate the full-length PRO cDNA or to isolate other cDNAs, in
CC chromosome and gene mapping, in the generation of antisense RNA and DNA,
CC for preparing PRO polypeptides, for generating transgenic animals or
CC knockout animals which are useful in the development and screening of
CC therapeutically useful reagents, as probes and for the genetic analysis
CC of individuals with genetic disorders as well as for recombinantly
CC expressing the protein and for chromosome identification. The proteins
CC are useful as molecular marker for protein electrophoresis purposes, as
CC therapeutic agents, for screening compounds to identify those that mimic
CC the PRO polypeptide (agonists) or prevent the effect of the PRO
CC polypeptide (antagonists). The polynucleotides and proteins are useful
CC for tissue typing. PRO antibodies are useful for immunohistochemical
CC staining and/or assay of sample fluids. Anti-PRO antibodies are useful in
CC diagnostic assays for PRO e.g. detecting its expression in specific
CC cells, tissues or serum and for affinity purification of PRO from
CC recombinant cell culture or natural sources. The PRO genes may also be
CC used in gene therapy, particularly for replacing a defective gene. The
CC sequence presented is a gene encoding a PRO polynucleotide of the
CC invention.
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

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Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   |  |  | | | |  || |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32
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RESULT 115
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ID ACD23705 standard; cDNA; 1378 BP.
XX
AC ACD23705;
XX
DT 26-AUG-2003 (first entry)
XX
DE Human PRO polynucleotide #48.
XX
KW Human; PRO; gene; ss; secreted polypeptide; transmembrane polypeptide;
KW leukocyte homing; rheumatoid arthritis; psoriasis; multiple sclerosis;
KW mucosal lesion; enterocolitis Zollinger Ellison syndrome; asthma;
KW antiasthmatic; antirheumatic; antiarthritic; neuroprotective.
XX
OS Homo sapiens.
XX
PN US2003064923-A1.
XX
PD 03-APR-2003.
XX
PF 13-JUL-2001; 2001US-00905348.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.

PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
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PR 28-OCT-1997; 97US-0063541P.
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PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
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PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
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PR 17-NOV-1997; 97US-0065846P.
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PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
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PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
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PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-567190/53.
DR P-PSDB; ABO17602.
XX
PT Novel secreted and transmembrane polypeptide for modulating biological
PT activity of cell expressing the polypeptide, identifying agonists or
PT antagonists of polypeptide, and as molecular weight markers.
XX
PS Claim 2; Fig 97; 471pp; English.
XX
CC The invention relates to human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC polypeptides are useful for detecting PRO polypeptides and for linking a
CC bioactive molecule to a cell expressing the polypeptides, where the
CC bioactive molecule is a toxin, radiolabel or an antibody. The bioactive
CC material causes the death of the cell. The polypeptides or antibodies
CC specific to the polypeptides are useful for modulating at least one
CC biological activity of a cell expressing the polypeptides. The
CC polypeptides are useful for treating disorders associated with leukocyte
CC homing such as asthma, rheumatoid arthritis, psoriasis and multiple
CC sclerosis, repair of acute and chronic mucosal lesions such as
CC enterocolitis and Zollinger Ellison syndrome and for identifying agonists
CC or antagonists of the polypeptides. The polynucleotides are useful as
CC hybridization probes, in chromosome and gene mapping, in generation of
CC antisense RNA and DNA, in the preparation of PRO polypeptides and for
CC generating probes for polymerase chain reaction (PCR), Northern analysis,
CC Southern analysis and Western analysis. This sequence represents a human
CC PRO polynucleotide of the invention
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

Qy 399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
Db 131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy 459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
Db 71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32

RESULT 116
ADB77788/c
ID ADB77788 standard; cDNA; 1378 BP.
XX
AC ADB77788;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human secreted/transmembrane protein cDNA, #52.
XX
KW Human; gene; ss; PRO; secreted; transmembrane; gastrointestinal mucosa;

KW mucosal lesion; skin disease; keratinocyte differentiation; psoriasis;
KW Parkinson's disease; Alzheimer's diseases; amyotrophic lateral sclerosis;
KW ALS; neuropathy; cell growth; cancer; tumour; viral infection;
KW neurodegenerative disease; antithrombotic agent; haemorrhage;
KW endometrial bleeding angiogenesis; kidney tissue; apoptosis; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy; nootropic;
KW neuroprotective; cytostatic; virucide; anticoagulant.
XX
OS Homo sapiens.
XX
PN US2003077654-A1.
XX
PD 24-APR-2003.
XX
PF 10-JUL-2001; 2001US-00902759.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-765399/72.
DR P-PSDB; ADB77789.
XX
PT New isolated secreted and transmembrane polypeptide, useful for treating
PT diseases, e.g. Parkinson's disease, Alzheimer's disease, amyotrophic
PT lateral sclerosis, cancer, neuropathies, diabetes and psoriasis.
XX
PS Claim 2; Fig 97; 467pp; English.
XX
CC The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. PRO polypeptides are also useful
CC for treating disorders associated with the preservation and maintenance
CC of gastrointestinal mucosa and the repair of acute and chronic mucosal
CC lesions, skin diseases associated with abnormal keratinocyte
CC differentiation (e.g. psoriasis), Parkinson's disease, Alzheimer's
CC diseases, amyotrophic lateral sclerosis (ALS), neuropathies and
CC additionally, disease related to uncontrolled cell growth, e.g. cancer.
CC PRO polypeptides also serves as tumour specific antigens which may be
CC exploited as therapeutic targets for anti-tumour drugs, and are also
CC employed therapeutically in vivo for lessening the effects of viral
CC infection. The PRO polypeptides can be also used in assays to determine
CC if it has a role in neurodegenerative diseases or their reversal, as an

CC heparin, in treating other PRO-associated disorders, in modulating
CC endometrial bleeding angiogenesis, and may also have an effect on kidney
CC tissue. PRO polypeptides and their portions affect the expression of
CC genes which have a role in apoptosis. The polynucleotides are useful in
CC molecular biology including uses as hybridisation probes for cDNA library
CC to isolate the full-length PRO cDNA or to isolate other cDNAs, in
CC chromosome and gene mapping, in the generation of antisense RNA and DNA,
CC for preparing PRO polypeptides, for generating transgenic animals or
CC knockout animals which are useful in the development and screening of
CC therapeutically useful reagents, as probes and for the genetic analysis
CC of individuals with genetic disorders as well as for recombinantly
CC expressing the protein and for chromosome identification. The proteins
CC are useful as molecular marker for protein electrophoresis purposes, as
CC therapeutic agents, for screening compounds to identify those that mimic
CC the PRO polypeptide (agonists) or prevent the effect of the PRO
CC polypeptide (antagonists). The polynucleotides and proteins are useful
CC for tissue typing. PRO antibodies are useful for immunohistochemical
CC staining and/or assay of sample fluids. Anti-PRO antibodies are useful in
CC diagnostic assays for PRO e.g. detecting its expression in specific
CC cells, tissues or serum and for affinity purification of PRO from
CC recombinant cell culture or natural sources. The PRO genes may also be
CC used in gene therapy, particularly for replacing a defective gene. The
CC sequence presented is a gene encoding a PRO polynucleotide of the
CC invention.
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

```
Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   |  |  | | | |  | ||  |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32
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RESULT 117
ADB74924/c
ID ADB74924 standard; cDNA; 1378 BP.
XX
AC ADB74924;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human secreted/transmembrane protein cDNA, #52.
XX
KW Human; gene; ss; PRO; secreted; transmembrane; gastrointestinal mucosa;
KW mucosal lesion; skin disease; keratinocyte differentiation; psoriasis;
KW Parkinson's disease; Alzheimer's diseases; amyotrophic lateral sclerosis;
KW ALS; neuropathy; cell growth; cancer; tumour; viral infection;
KW neurodegenerative disease; antithrombotic agent; haemorrhage;
KW endometrial bleeding angiogenesis; kidney tissue; apoptosis; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy; nootropic;
KW neuroprotective; cytostatic; virucide; anticoagulant.
XX
OS Homo sapiens.
XX
PN US2003082542-A1.
XX
PD 01-MAY-2003.
XX
PF 17-JUL-2001; 2001US-00907979.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
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PR 24-OCT-1997; 97US-0062814P.
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PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.

PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-765412/72.
DR P-PSDB; ADB74925.
XX
PT Novel isolated native PRO polypeptide useful for tissue typing,
PT modulating biological activity of cell, as molecular weight markers in
PT protein electrophoresis, for treating enterocolitis, Zollinger-Ellison
PT syndrome.
XX
PS Claim 2; Fig 97; 475pp; English.
XX
CC The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. PRO polypeptides are also useful
CC for treating disorders associated with the preservation and maintenance
CC of gastrointestinal mucosa and the repair of acute and chronic mucosal
CC lesions, skin diseases associated with abnormal keratinocyte
CC differentiation (e.g. psoriasis), Parkinson's disease, Alzheimer's
CC diseases, amyotrophic lateral sclerosis (ALS), neuropathies and
CC additionally, disease related to uncontrolled cell growth, e.g. cancer.
CC PRO polypeptides also serves as tumour specific antigens which may be
CC exploited as therapeutic targets for anti-tumour drugs, and are also
CC employed therapeutically in vivo for lessening the effects of viral
CC infection. The PRO polypeptides can be also used in assays to determine
CC if it has a role in neurodegenerative diseases or their reversal, as an
CC antithrombotic agent with reduced risk for haemorrhage as compared with
CC heparin, in treating other PRO-associated disorders, in modulating
CC endometrial bleeding angiogenesis, and may also have an effect on kidney
CC tissue. PRO polypeptides and their portions affect the expression of
CC genes which have a role in apoptosis. The polynucleotides are useful in
CC molecular biology including uses as hybridisation probes for cDNA library
CC to isolate the full-length PRO cDNA or to isolate other cDNAs, in
CC chromosome and gene mapping, in the generation of antisense RNA and DNA,
CC for preparing PRO polypeptides, for generating transgenic animals or
CC knockout animals which are useful in the development and screening of
CC therapeutically useful reagents, as probes and for the genetic analysis
CC of individuals with genetic disorders as well as for recombinantly
CC expressing the protein and for chromosome identification. The proteins
CC are useful as molecular marker for protein electrophoresis purposes, as
CC therapeutic agents, for screening compounds to identify those that mimic
CC the PRO polypeptide (agonists) or prevent the effect of the PRO
CC polypeptide (antagonists). The polynucleotides and proteins are useful
CC for tissue typing. PRO antibodies are useful for immunohistochemical
CC staining and/or assay of sample fluids. Anti-PRO antibodies are useful in
CC diagnostic assays for PRO e.g. detecting its expression in specific
CC cells, tissues or serum and for affinity purification of PRO from
CC used in gene therapy, particularly for replacing a defective gene. The
CC sequence presented is a gene encoding a PRO polynucleotide of the
CC invention.
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

Qy 399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
Db 131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy 459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
Db 71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32

RESULT 118
ADC28570/c
ID ADC28570 standard; cDNA; 1378 BP.
XX
AC ADC28570;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human secreted/transmembrane protein cDNA, #52.
XX
KW Human; gene; ss; PRO; secreted; transmembrane; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy;
KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW retinitis pigmentosum; obesity; diabete; hyperinsulinaemia;
KW hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
KW arthritis; cardiant; vulnerary; cytostatic; ophthalmological;
KW osteopathic; antiarthritic; anorectic.
XX
OS Homo sapiens.
XX
PN US2003059772-A1.
XX
PD 27-MAR-2003.
XX
PF 18-JUL-2001; 2001US-00909064.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
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PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
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PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
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PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
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PR 24-NOV-1997; 97US-0066511P.
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PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
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PR 14-SEP-1998; 98US-0100262P.
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PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-540670/51.
DR P-PSDB; ADC28571.
XX
PT Novel secreted and transmembrane polypeptides and polynucleotides
PT encoding them useful for treating skin, neurodegenerative diseases, as an
PT antithrombotic agent and for inducing endothelial cell apoptosis.
XX
PS Claim 2; SEQ ID NO 262; 470pp; English.
XX
CC The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. The PRO polypeptides or
CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
CC bioreactors. These are useful for stimulating hypertrophy of neonatal
CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
CC proliferation of endothelial cells, modulating the proliferation of
CC stimulated T-lymphocytes, enhancing the survival or proliferation of
CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
CC -differentiation of chondrocytes. In particular, these are useful for
CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
CC tumours, retinal disorders or injuries (e.g. loss of sight due to
CC retinitis pigmentosum), obesity, diabetes, hyperinsulinaemia,
CC hypoinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
CC arthritis) in mammals. PRO polypeptides and their portions affect the
CC expression of genes which have a role in cell death. The polynucleotides
CC are useful in molecular biology including uses as hybridisation probes
CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
CC and DNA, for preparing PRO polypeptides, for generating transgenic
CC animals or knockout animals which are useful in the development and
CC screening of therapeutically useful reagents, as probes and for the
CC genetic analysis of individuals with genetic disorders as well as for
CC recombinantly expressing the protein and for chromosome identification.
CC The proteins are useful as molecular marker for protein electrophoresis
CC purposes, as therapeutic agents, for screening compounds to identify
CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
CC useful for tissue typing. PRO antibodies are useful for
CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
CC expression in specific cells, tissues or serum and for affinity
CC purification of PRO from recombinant cell culture or natural sources. The
CC PRO genes may also be used in gene therapy, particularly for replacing a
CC defective gene. The sequence presented is a gene encoding a PRO
CC polynucleotide of the invention.
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

Qy 399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
Db 131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy 459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
Db 71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32

RESULT 119
ADC39770/c
ID ADC39770 standard; cDNA; 1378 BP.

XX
AC ADC39770;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human secreted/transmembrane protein cDNA, #52.
XX
KW Human; gene; ss; PRO; secreted; transmembrane; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy;
KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW retinitis pigmentosum; obesity; diabete; hyperinsulinaemia;
KW hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
KW arthritis; cardiant; vulnerary; cytostatic; ophthalmological;
KW osteopathic; antiarthritic; anorectic.
XX
OS Homo sapiens.
XX
PN US2003059828-A1.
XX
PD 27-MAR-2003.
XX
PF 13-JUL-2001; 2001US-00904553.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
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PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
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PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
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PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
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PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
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PI Williams PM, Wood WI;
XX
DR WPI; 2003-540675/51.
DR P-PSDB; ADC39771.
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PT Novel secreted and transmembrane polypeptides and polynucleotides
PT encoding them useful for treating skin, neurodegenerative diseases, as an
PT antithrombotic agent and for inducing endothelial cell apoptosis.
XX
PS Claim 2; SEQ ID NO 262; 477pp; English.
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CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
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Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32
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RESULT 120
ADC40284/c
ID ADC40284 standard; cDNA; 1378 BP.
XX
AC ADC40284;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human secreted/transmembrane protein cDNA, #52.
XX
KW Human; gene; ss; PRO; secreted; transmembrane; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy;
KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
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KW hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
KW arthritis; cardiant; vulnerary; cytostatic; ophthalmological;
KW osteopathic; antiarthritic; anorectic.
XX
OS Homo sapiens.
XX
PN US2003059829-A1.
XX
PD 27-MAR-2003.
XX
PF 13-JUL-2001; 2001US-00905381.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
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PR 17-SEP-1997; 97US-0059122P.
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PR 29-OCT-1997; 97US-0063734P.
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PR 29-OCT-1997; 97US-0064215P.
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PR 18-NOV-1997; 97US-0065693P.
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PR 14-SEP-1998; 98WO-US019177.
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PR 22-DEC-1998; 98US-0113296P.
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PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.

PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
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PR 20-DEC-1999; 99WO-US030911.
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PR 05-JAN-2000; 2000WO-US000219.
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PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
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PR 18-SEP-2000; 2000US-00665350.
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DR WPI; 2003-540676/51.
DR P-PSDB; ADC40285.
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Db 131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy 459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
Db 71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32

RESULT 121
ADC19108/c
ID ADC19108 standard; cDNA; 1378 BP.
XX
AC ADC19108;
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DT 18-DEC-2003 (first entry)
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DE Human secreted/transmembrane protein cDNA, #52.
XX
KW Human; gene; ss; PRO; secreted; transmembrane; therapeutic;
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KW arthritis; cardiant; vulnerary; cytostatic; ophthalmological;
KW osteopathic; antiarthritic; anorectic.
XX
OS Homo sapiens.
XX
PN US2003036061-A1.
XX
PD 20-FEB-2003.
XX
PF 18-JUL-2001; 2001US-00909204.
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PR 17-SEP-1997; 97US-0059113P.
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PR 17-SEP-1997; 97US-0059121P.
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PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
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PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.

XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI William PM, Wood WI;
XX
DR WPI; 2003-615762/58.
DR P-PSDB; ADC19109.
XX
PT Novel secreted and transmembrane polypeptide for modulating biological
PT activity of cell expressing the polypeptide, identifying agonists or
PT antagonists of polypeptide, and as molecular weight markers.
XX
PS Claim 2; SEQ ID NO 262; 476pp; English.
XX
CC The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. The PRO polypeptides or
CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
CC bioreactors. These are useful for stimulating hypertrophy of neonatal
CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
CC proliferation of endothelial cells, modulating the proliferation of
CC stimulated T-lymphocytes, enhancing the survival or proliferation of
CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
CC -differentiation of chondrocytes. In particular, these are useful for
CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
CC tumours, retinal disorders or injuries (e.g. loss of sight due to
CC retinitis pigmentosum), obesity, diabetes, hyperinsulinaemia,
CC hypoinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
CC arthritis) in mammals. PRO polypeptides and their portions affect the
CC expression of genes which have a role in cell death. The polynucleotides
CC are useful in molecular biology including uses as hybridisation probes
CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
CC and DNA, for preparing PRO polypeptides, for generating transgenic
CC animals or knockout animals which are useful in the development and
CC screening of therapeutically useful reagents, as probes and for the
CC genetic analysis of individuals with genetic disorders as well as for
CC recombinantly expressing the protein and for chromosome identification.
CC The proteins are useful as molecular marker for protein electrophoresis
CC purposes, as therapeutic agents, for screening compounds to identify
CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
CC useful for tissue typing. PRO antibodies are useful for
CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
CC expression in specific cells, tissues or serum and for affinity
CC purification of PRO from recombinant cell culture or natural sources. The
CC PRO genes may also be used in gene therapy, particularly for replacing a
CC defective gene. The sequence presented is a gene encoding a PRO
CC polynucleotide of the invention.
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

Qy 399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
Db 131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy 459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498

```
                    | |   | ||  |  | |||| || ||  | ||  ||| |
Db          71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32
```

RESULT 122
ADC34408/c
ID ADC34408 standard; cDNA; 1378 BP.
XX
AC ADC34408;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human secreted/transmembrane protein cDNA, #52.
XX
KW Human; gene; ss; PRO; secreted; transmembrane; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy;
KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW retinitis pigmentosum; obesity; diabete; hyperinsulinaemia;
KW hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
KW arthritis; cardiant; vulnerary; cytostatic; ophthalmological;
KW osteopathic; antiarthritic; anorectic.
XX
OS Homo sapiens.
XX
PN US2003036094-A1.
XX
PD 20-FEB-2003.
XX
PF 13-JUL-2001; 2001US-00904820.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-615763/58.
DR P-PSDB; ADC34409.
XX
PT Novel secreted and transmembrane polypeptides and polynucleotides
PT encoding them useful for treating cancers, asthma, rheumatoid arthritis,
PT neurological diseases, and skin diseases.
XX
PS Claim 2; SEQ ID NO 262; 478pp; English.
XX
CC The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating

CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. The PRO polypeptides or
CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
CC bioreactors. These are useful for stimulating hypertrophy of neonatal
CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
CC proliferation of endothelial cells, modulating the proliferation of
CC stimulated T-lymphocytes, enhancing the survival or proliferation of
CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
CC -differentiation of chondrocytes. In particular, these are useful for
CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
CC tumours, retinal disorders or injuries (e.g. loss of sight due to
CC retinitis pigmentosum), obesity, diabetes, hyperinsulinaemia,
CC hypoinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
CC arthritis) in mammals. PRO polypeptides and their portions affect the
CC expression of genes which have a role in cell death. The polynucleotides
CC are useful in molecular biology including uses as hybridisation probes
CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
CC and DNA, for preparing PRO polypeptides, for generating transgenic
CC animals or knockout animals which are useful in the development and
CC screening of therapeutically useful reagents, as probes and for the
CC genetic analysis of individuals with genetic disorders as well as for
CC recombinantly expressing the protein and for chromosome identification.
CC The proteins are useful as molecular marker for protein electrophoresis
CC purposes, as therapeutic agents, for screening compounds to identify
CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
CC useful for tissue typing. PRO antibodies are useful for
CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
CC expression in specific cells, tissues or serum and for affinity
CC purification of PRO from recombinant cell culture or natural sources. The
CC PRO genes may also be used in gene therapy, particularly for replacing a
CC defective gene. The sequence presented is a gene encoding a PRO
CC polypeptide of the invention.
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

```
Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   |  | | | |  | || |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32
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RESULT 123
ADC29463/c
ID ADC29463 standard; cDNA; 1378 BP.
XX
AC ADC29463;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human secreted/transmembrane protein cDNA, #52.
XX
KW Human; gene; ss; PRO; secreted; transmembrane; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy;
KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW retinitis pigmentosum; obesity; diabete; hyperinsulinaemia;
KW hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
KW arthritis; cardiant; vulnerary; cytostatic; ophthalmological;
KW osteopathic; antiarthritic; anorectic.
XX
OS Homo sapiens.
XX
PN US2003049676-A1.
XX
PD 13-MAR-2003.
XX
PF 10-JUL-2001; 2001US-00902736.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.

PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Ann Roy M, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-585107/55.
DR P-PSDB; ADC29464.
XX
PT Novel isolated PRO polypeptides e.g. PRO234 (useful for treating
PT rheumatoid arthritis, psoriasis and multiple sclerosis) and PRO187
PT (useful for treating Alzheimer's disease, cancer).
XX
PS Claim 2; SEQ ID NO 262; 451pp; English.
XX
CC The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. The PRO polypeptides or
CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
CC bioreactors. These are useful for stimulating hypertrophy of neonatal
CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
CC proliferation of endothelial cells, modulating the proliferation of
CC stimulated T-lymphocytes, enhancing the survival or proliferation of
CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
CC -differentiation of chondrocytes. In particular, these are useful for
CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
CC tumours, retinal disorders or injuries (e.g. loss of sight due to
CC retinitis pigmentosum), obesity, diabetes, hyperinsulinaemia,
CC hypoinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
CC arthritis) in mammals. PRO polypeptides and their portions affect the
CC expression of genes which have a role in cell death. The polynucleotides
CC are useful in molecular biology including uses as hybridisation probes
CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
CC and DNA, for preparing PRO polypeptides, for generating transgenic
CC animals or knockout animals which are useful in the development and
CC screening of therapeutically useful reagents, as probes and for the
CC genetic analysis of individuals with genetic disorders as well as for
CC recombinantly expressing the protein and for chromosome identification.
CC The proteins are useful as molecular marker for protein electrophoresis
CC purposes, as therapeutic agents, for screening compounds to identify
CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
CC useful for tissue typing. PRO antibodies are useful for
CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
CC expression in specific cells, tissues or serum and for affinity
CC purification of PRO from recombinant cell culture or natural sources. The
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XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
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Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

Qy 399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
Db 131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy 459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
Db 71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32

RESULT 124
ADC28994/c
ID ADC28994 standard; cDNA; 1378 BP.
XX
AC ADC28994;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human secreted/transmembrane protein cDNA, #52.
XX
KW Human; gene; ss; PRO; secreted; transmembrane; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy;
KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW retinitis pigmentosum; obesity; diabete; hyperinsulinaemia;
KW hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
KW arthritis; cardiant; vulnerary; cytostatic; ophthalmological;
KW osteopathic; antiarthritic; anorectic.
XX
OS Homo sapiens.
XX
PN US2003049677-A1.
XX
PD 13-MAR-2003.
XX
PF 17-JUL-2001; 2001US-00907794.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.

PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
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PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
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PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-615797/58.
DR P-PSDB; ADC28995.
XX
PT Novel secreted and transmembrane polypeptides and polynucleotides
PT encoding them useful for treating skin, neurodegenerative diseases, as an
PT antithrombotic agent and for inducing endothelial cell apoptosis.
XX
PS Claim 2; SEQ ID NO 262; 470pp; English.
XX
CC The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. The PRO polypeptides or
CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
CC bioreactors. These are useful for stimulating hypertrophy of neonatal
CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
CC proliferation of endothelial cells, modulating the proliferation of
CC stimulated T-lymphocytes, enhancing the survival or proliferation of
CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
CC -differentiation of chondrocytes. In particular, these are useful for
CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
CC tumours, retinal disorders or injuries (e.g. loss of sight due to
CC retinitis pigmentosum), obesity, diabetes, hyperinsulinaemia,
CC hypoinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
CC arthritis) in mammals. PRO polypeptides and their portions affect the
CC expression of genes which have a role in cell death. The polynucleotides
CC are useful in molecular biology including uses as hybridisation probes
CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
CC and DNA, for preparing PRO polypeptides, for generating transgenic
CC animals or knockout animals which are useful in the development and
CC screening of therapeutically useful reagents, as probes and for the
CC genetic analysis of individuals with genetic disorders as well as for
CC recombinantly expressing the protein and for chromosome identification.
CC The proteins are useful as molecular marker for protein electrophoresis
CC purposes, as therapeutic agents, for screening compounds to identify
CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
CC useful for tissue typing. PRO antibodies are useful for
CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
CC expression in specific cells, tissues or serum and for affinity
CC purification of PRO from recombinant cell culture or natural sources. The
CC PRO genes may also be used in gene therapy, particularly for replacing a
CC defective gene. The sequence presented is a gene encoding a PRO
CC polynucleotide of the invention.
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;

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Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32


RESULT 125
ADC40879/c
ID   ADC40879 standard; cDNA; 1378 BP.
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AC   ADC40879;
XX
DT   18-DEC-2003  (first entry)
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DE   Human secreted/transmembrane protein cDNA, #52.
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KW   Human; gene; ss; PRO; secreted; transmembrane; therapeutic;
KW   tissue typing; immunohistochemical staining; gene therapy;
KW   neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW   endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW   rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
KW   cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW   retinitis pigmentosum; obesity; diabete; hyperinsulinaemia;
KW   hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
KW   arthritis; cardiant; vulnerary; cytostatic; ophthalmological;
KW   osteopathic; antiarthritic; anorectic.
XX
OS   Homo sapiens.
XX
PN   US2003054400-A1.
XX
PD   20-MAR-2003.
XX
PF   10-JUL-2001; 2001US-00902692.
XX
PR   17-SEP-1997;   97US-0059113P.
PR   17-SEP-1997;   97US-0059115P.
PR   17-SEP-1997;   97US-0059117P.
PR   17-SEP-1997;   97US-0059119P.
PR   17-SEP-1997;   97US-0059121P.
PR   17-SEP-1997;   97US-0059122P.
PR   17-SEP-1997;   97US-0059184P.
PR   18-SEP-1997;   97US-0059263P.
PR   18-SEP-1997;   97US-0059266P.
PR   15-OCT-1997;   97US-0062125P.
PR   17-OCT-1997;   97US-0062285P.
PR   17-OCT-1997;   97US-0062287P.
PR   21-OCT-1997;   97US-0063486P.
PR   24-OCT-1997;   97US-0062814P.
PR   24-OCT-1997;   97US-0062816P.
PR   24-OCT-1997;   97US-0063045P.
PR   24-OCT-1997;   97US-0063120P.
PR   24-OCT-1997;   97US-0063121P.
PR   24-OCT-1997;   97US-0063127P.
PR   24-OCT-1997;   97US-0063128P.
PR   27-OCT-1997;   97US-0063327P.
PR   27-OCT-1997;   97US-0063329P.
PR   28-OCT-1997;   97US-0063541P.
PR   28-OCT-1997;   97US-0063542P.
PR   28-OCT-1997;   97US-0063544P.
PR   28-OCT-1997;   97US-0063549P.
PR   28-OCT-1997;   97US-0063550P.
PR   28-OCT-1997;   97US-0063564P.
PR   29-OCT-1997;   97US-0063435P.
PR   29-OCT-1997;   97US-0063704P.
PR   29-OCT-1997;   97US-0063732P.
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PR   29-OCT-1997;   97US-0063738P.
PR   29-OCT-1997;   97US-0064215P.
PR   31-OCT-1997;   97US-0063870P.
PR   31-OCT-1997;   97US-0064103P.
PR   03-NOV-1997;   97US-0064248P.
PR   07-NOV-1997;   97US-0064809P.
PR   12-NOV-1997;   97US-0065186P.
PR   17-NOV-1997;   97US-0065846P.
PR   18-NOV-1997;   97US-0065693P.
PR   21-NOV-1997;   97US-0066120P.
PR   21-NOV-1997;   97US-0066364P.
PR   24-NOV-1997;   97US-0066453P.
PR   24-NOV-1997;   97US-0066466P.
PR   24-NOV-1997;   97US-0066511P.
PR   24-NOV-1997;   97US-0066770P.
PR   24-NOV-1997;   97US-0066772P.
PR   25-NOV-1997;   97US-0066840P.
PR   12-DEC-1997;   97US-0069425P.
PR   04-JUN-1998;   98US-0088026P.
PR   10-SEP-1998;   98US-0099803P.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98US-0100262P.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98US-0100858P.
PR   17-SEP-1998;   98WO-US019437.
PR   13-OCT-1998;   98US-0104080P.
PR   20-NOV-1998;   98US-0109304P.
PR   01-DEC-1998;   98WO-US025108.
PR   22-DEC-1998;   98US-0113296P.
PR   07-JUL-1999;   99US-0143048P.
PR   26-JUL-1999;   99US-0145698P.
PR   28-JUL-1999;   99US-0146222P.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   01-DEC-1999;   99WO-US028301.
PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
PR   08-DEC-1999;   99WO-US020594.
PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   20-DEC-1999;   99WO-US030999.
PR   05-JAN-2000; 2000WO-US000219.
PR   11-FEB-2000; 2000WO-US003565.
PR   22-FEB-2000; 2000WO-US004414.
PR   24-FEB-2000; 2000WO-US005004.
PR   02-MAR-2000; 2000WO-US005841.
PR   20-MAR-2000; 2000WO-US007377.
PR   30-MAR-2000; 2000WO-US008439.
PR   22-MAY-2000; 2000WO-US014042.
PR   02-JUN-2000; 2000WO-US015264.
PR   28-JUL-2000; 2000WO-US020710.
PR   24-AUG-2000; 2000WO-US023328.
PR   18-SEP-2000; 2000US-00665350.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi A,  Botstein D,  Desnoyers L,  Eaton DL,  Ferrara N;
PI   Filvaroff E,  Fong S,  Gao W,  Gerber H,  Gerritsen ME,  Goddard A;
PI   Godowski PJ,  Grimaldi JC,  Gurney AL,  Hillan KJ,  Kljavin IJ;
PI   Mather JP,  Pan J,  Paoni NF,  Roy MA,  Stewart TA,  Tumas D;
PI   Williams PM,  Wood WJ;
XX
DR   WPI; 2003-708343/67.
DR   P-PSDB; ADC40880.
XX
PT   Novel PRO polypeptides useful for treating Parkinson's disease,
PT   Alzheimer's disease, enterocolitis, Zollinger-Ellison syndrome,
PT   psoriasis, epidermoid carcinoma of the vulva and gliomas, gynecological
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PT diseases.
XX
PS Claim 2; SEQ ID NO 262; 473pp; English.
XX
CC The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. The PRO polypeptides or
CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
CC bioreactors. These are useful for stimulating hypertrophy of neonatal
CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
CC proliferation of endothelial cells, modulating the proliferation of
CC stimulated T-lymphocytes, enhancing the survival or proliferation of
CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
CC -differentiation of chondrocytes. In particular, these are useful for
CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
CC tumours, retinal disorders or injuries (e.g. loss of sight due to
CC retinitis pigmentosum), obesity, diabetes, hyperinsulinaemia,
CC hypoinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
CC arthritis) in mammals. PRO polypeptides and their portions affect the
CC expression of genes which have a role in cell death. The polynucleotides
CC are useful in molecular biology including uses as hybridisation probes
CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
CC and DNA, for preparing PRO polypeptides, for generating transgenic
CC animals or knockout animals which are useful in the development and
CC screening of therapeutically useful reagents, as probes and for the
CC genetic analysis of individuals with genetic disorders as well as for
CC recombinantly expressing the protein and for chromosome identification.
CC The proteins are useful as molecular marker for protein electrophoresis
CC purposes, as therapeutic agents, for screening compounds to identify
CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
CC useful for tissue typing. PRO antibodies are useful for
CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
CC expression in specific cells, tissues or serum and for affinity
CC purification of PRO from recombinant cell culture or natural sources. The
CC PRO genes may also be used in gene therapy, particularly for replacing a
CC defective gene. The sequence presented is a gene encoding a PRO
CC polypeptide of the invention.
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

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Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
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Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
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Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32
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RESULT 126
ADC19536/c
ID ADC19536 standard; cDNA; 1378 BP.
XX
AC ADC19536;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human secreted/transmembrane protein cDNA, #52.
XX

KW Human; gene; ss; PRO; secreted; transmembrane; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy;
KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW retinitis pigmentosum; obesity; diabete; hyperinsulinaemia;
KW hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
KW arthritis; cardiant; vulnerary; cytostatic; ophthalmological;
KW osteopathic; antiarthritic; anorectic.
XX
OS Homo sapiens.
XX
PN US2003054441-A1.
XX
PD 20-MAR-2003.
XX
PF 12-JUL-2001; 2001US-00905056.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
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PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
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PR 28-OCT-1997; 97US-0063550P.
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PR 29-OCT-1997; 97US-0063704P.
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PR 03-NOV-1997; 97US-0064248P.
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PR 21-NOV-1997; 97US-0066120P.
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PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.

PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI William PM, Wood WI;
XX
DR WPI; 2003-695902/66.
DR P-PSDB; ADC19537.
XX
PT Novel isolated PRO polypeptide useful for treating Parkinson's disease,
PT enterocolitis, Zollinger-Ellison syndrome, gastrointestinal ulceration,
PT Alzheimer's disease, amyotrophic lateral sclerosis.
XX
PS Claim 2; SEQ ID NO 262; 478pp; English.
XX
CC The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. The PRO polypeptides or
CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
CC bioreactors. These are useful for stimulating hypertrophy of neonatal
CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
CC proliferation of endothelial cells, modulating the proliferation of
CC stimulated T-lymphocytes, enhancing the survival or proliferation of
CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
CC -differentiation of chondrocytes. In particular, these are useful for
CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
CC tumours, retinal disorders or injuries (e.g. loss of sight due to
CC retinitis pigmentosum), obesity, diabetes, hyperinsulinaemia,
CC hypoinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
CC arthritis) in mammals. PRO polypeptides and their portions affect the
CC expression of genes which have a role in cell death. The polynucleotides
CC are useful in molecular biology including uses as hybridisation probes
CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
CC and DNA, for preparing PRO polypeptides, for generating transgenic
CC animals or knockout animals which are useful in the development and
CC screening of therapeutically useful reagents, as probes and for the
CC genetic analysis of individuals with genetic disorders as well as for
CC recombinantly expressing the protein and for chromosome identification.
CC The proteins are useful as molecular marker for protein electrophoresis
CC purposes, as therapeutic agents, for screening compounds to identify
CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
CC useful for tissue typing. PRO antibodies are useful for
CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
CC expression in specific cells, tissues or serum and for affinity
CC purification of PRO from recombinant cell culture or natural sources. The
CC PRO genes may also be used in gene therapy, particularly for replacing a
CC defective gene. The sequence presented is a gene encoding a PRO
CC polynucleotide of the invention.
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

Qy 399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
Db 131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy 459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
Db 71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32

RESULT 127
ADC33984/c
ID ADC33984 standard; cDNA; 1378 BP.
XX
AC ADC33984;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human secreted/transmembrane protein cDNA, #52.
XX
KW Human; gene; ss; PRO; secreted; transmembrane; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy;
KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW retinitis pigmentosum; obesity; diabete; hyperinsulinaemia;
KW hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
KW arthritis; cardiant; vulnerary; cytostatic; ophthalmological;
KW osteopathic; antiarthritic; anorectic.
XX
OS Homo sapiens.
XX
PN US2003073077-A1.
XX
PD 17-APR-2003.
XX
PF 12-JUL-2001; 2001US-00905088.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.

PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-695953/66.
DR P-PSDB; ADC33985.
XX
PT Novel isolated PRO polypeptides e.g. PRO245 and PRO1868, useful for
PT treating e.g. Parkinson's disease, Alzheimer's disease, amyotrophic
PT lateral sclerosis, cancer, neuropathies, diabetes and psoriasis.
XX
PS Claim 2; SEQ ID NO 262; 476pp; English.
XX
CC The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. The PRO polypeptides or
CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
CC bioreactors. These are useful for stimulating hypertrophy of neonatal
CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
CC proliferation of endothelial cells, modulating the proliferation of
CC stimulated T-lymphocytes, enhancing the survival or proliferation of
CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
CC -differentiation of chondrocytes. In particular, these are useful for
CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
CC tumours, retinal disorders or injuries (e.g. loss of sight due to
CC retinitis pigmentosum), obesity, diabetes, hyperinsulinaemia,
CC hypoinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
CC arthritis) in mammals. PRO polypeptides and their portions affect the
CC expression of genes which have a role in cell death. The polynucleotides
CC are useful in molecular biology including uses as hybridisation probes
CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
CC and DNA, for preparing PRO polypeptides, for generating transgenic
CC animals or knockout animals which are useful in the development and
CC screening of therapeutically useful reagents, as probes and for the
CC genetic analysis of individuals with genetic disorders as well as for
CC recombinantly expressing the protein and for chromosome identification.
CC The proteins are useful as molecular marker for protein electrophoresis
CC purposes, as therapeutic agents, for screening compounds to identify
CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
CC useful for tissue typing. PRO antibodies are useful for
CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
CC expression in specific cells, tissues or serum and for affinity
CC purification of PRO from recombinant cell culture or natural sources. The

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CC   PRO genes may also be used in gene therapy, particularly for replacing a
CC   defective gene. The sequence presented is a gene encoding a PRO
CC   polypeptide of the invention.
XX
SQ   Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 89;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   |  | | | | |  | || |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32


RESULT 128
ADC13054/c
ID   ADC13054 standard; cDNA; 1378 BP.
XX
AC   ADC13054;
XX
DT   18-DEC-2003  (first entry)
XX
DE   Human secreted/transmembrane protein cDNA, #52.
XX
KW   Human; gene; ss; PRO; secreted; transmembrane; therapeutic;
KW   tissue typing; immunohistochemical staining; gene therapy;
KW   neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW   endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW   rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
KW   cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW   retinitis pigmentosum; obesity; diabete; hyperinsulinaemia;
KW   hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
KW   arthritis; cardiant; vulnerary; cytostatic; ophthalmological;
KW   osteopathic; antiarthritic; anorectic.
XX
OS   Homo sapiens.
XX
PN   US2003073079-A1.
XX
PD   17-APR-2003.
XX
PF   17-JUL-2001; 2001US-00907575.
XX
PR   17-SEP-1997;   97US-0059113P.
PR   17-SEP-1997;   97US-0059115P.
PR   17-SEP-1997;   97US-0059117P.
PR   17-SEP-1997;   97US-0059119P.
PR   17-SEP-1997;   97US-0059121P.
PR   17-SEP-1997;   97US-0059122P.
PR   17-SEP-1997;   97US-0059184P.
PR   18-SEP-1997;   97US-0059263P.
PR   18-SEP-1997;   97US-0059266P.
PR   15-OCT-1997;   97US-0062125P.
PR   17-OCT-1997;   97US-0062285P.
PR   17-OCT-1997;   97US-0062287P.
PR   21-OCT-1997;   97US-0063486P.
PR   24-OCT-1997;   97US-0062814P.
PR   24-OCT-1997;   97US-0062816P.
PR   24-OCT-1997;   97US-0063045P.
PR   24-OCT-1997;   97US-0063120P.
PR   24-OCT-1997;   97US-0063121P.
PR   24-OCT-1997;   97US-0063127P.
PR   24-OCT-1997;   97US-0063128P.
PR   27-OCT-1997;   97US-0063327P.
PR   27-OCT-1997;   97US-0063329P.
PR   28-OCT-1997;   97US-0063541P.
PR   28-OCT-1997;   97US-0063542P.
PR   28-OCT-1997;   97US-0063544P.
PR   28-OCT-1997;   97US-0063549P.
PR   28-OCT-1997;   97US-0063550P.
PR   28-OCT-1997;   97US-0063564P.
PR   29-OCT-1997;   97US-0063435P.
PR   29-OCT-1997;   97US-0063704P.
PR   29-OCT-1997;   97US-0063732P.
PR   29-OCT-1997;   97US-0063734P.
PR   29-OCT-1997;   97US-0063735P.
PR   29-OCT-1997;   97US-0063738P.
PR   29-OCT-1997;   97US-0064215P.
PR   31-OCT-1997;   97US-0063870P.
PR   31-OCT-1997;   97US-0064103P.
PR   03-NOV-1997;   97US-0064248P.
PR   07-NOV-1997;   97US-0064809P.
PR   12-NOV-1997;   97US-0065186P.
PR   17-NOV-1997;   97US-0065846P.
PR   18-NOV-1997;   97US-0065693P.
PR   21-NOV-1997;   97US-0066120P.
PR   21-NOV-1997;   97US-0066364P.
PR   24-NOV-1997;   97US-0066453P.
PR   24-NOV-1997;   97US-0066466P.
PR   24-NOV-1997;   97US-0066511P.
PR   24-NOV-1997;   97US-0066770P.
PR   24-NOV-1997;   97US-0066772P.
PR   25-NOV-1997;   97US-0066840P.
PR   12-DEC-1997;   97US-0069425P.
PR   04-JUN-1998;   98US-0088026P.
PR   10-SEP-1998;   98US-0099803P.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98US-0100262P.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98US-0100858P.
PR   17-SEP-1998;   98WO-US019437.
PR   13-OCT-1998;   98US-0104080P.
PR   20-NOV-1998;   98US-0109304P.
PR   01-DEC-1998;   98WO-US025108.
PR   22-DEC-1998;   98US-0113296P.
PR   07-JUL-1999;   99US-0143048P.
PR   26-JUL-1999;   99US-0145698P.
PR   28-JUL-1999;   99US-0146222P.
PR   08-SEP-1999;   99WO-US020594.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   01-DEC-1999;   99WO-US028301.
PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   20-DEC-1999;   99WO-US030999.
PR   05-JAN-2000; 2000WO-US000219.
PR   11-FEB-2000; 2000WO-US003565.
PR   22-FEB-2000; 2000WO-US004414.
PR   24-FEB-2000; 2000WO-US005004.
PR   02-MAR-2000; 2000WO-US005841.
PR   20-MAR-2000; 2000WO-US007377.
PR   30-MAR-2000; 2000WO-US008439.
PR   22-MAY-2000; 2000WO-US014042.
PR   02-JUN-2000; 2000WO-US015264.
PR   28-JUL-2000; 2000WO-US020710.
PR   24-AUG-2000; 2000WO-US023328.
PR   18-SEP-2000; 2000US-00665350.
XX
PA   (GETH ) GENENTECH INC.
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PI   Ashkenazi A,  Botstein D,  Desnoyers L,  Eaton DL,  Ferrara N;
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PI   Godowski PJ,  Grimaldi JC,  Gurney AL,  Hillan KJ,  Kljavin IJ;
PI   Mather JP,  Pan J,  Paoni NF,  Roy MA,  Stewart TA,  Tumas D;
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PI   Williams PM,  Wood WI;
XX
DR   WPI; 2003-743809/70.
DR   P-PSDB; ADC13055.
XX
PT   Novel isolated secreted and transmembrane PRO polypeptides e.g. PRO245
PT   and PRO1868, useful for treating e.g. Parkinson's disease, Alzheimer's
PT   disease, amyotropic lateral sclerosis, cancer, neuropathies, diabetes and
PT   psoriasis.
XX
PS   Claim 2; SEQ ID NO 262; 473pp; English.
XX
CC   The invention discloses isolated PRO secreted/transmembrane polypeptides
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CC   purification of PRO from recombinant cell culture or natural sources. The
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  Query Match             0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 89;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   |  | | | | |  | || |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32


RESULT 129
ADC12506/c
ID   ADC12506 standard; cDNA; 1378 BP.
XX
AC   ADC12506;
XX
DT   18-DEC-2003  (first entry)
XX
DE   Human secreted/transmembrane protein cDNA, #52.
XX
KW   Human; gene; ss; PRO; secreted; transmembrane; therapeutic;
KW   tissue typing; immunohistochemical staining; gene therapy;
KW   neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW   endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW   rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
KW   cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW   retinitis pigmentosum; obesity; diabete; hyperinsulinaemia;
KW   hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
KW   arthritis; cardiant; vulnerary; cytostatic; ophthalmological;
KW   osteopathic; antiarthritic; anorectic.
XX
OS   Homo sapiens.
XX
PN   US2003082541-A1.
XX
PD   01-MAY-2003.
XX
PF   10-JUL-2001; 2001US-00902713.
XX
PR   17-SEP-1997;   97US-0059113P.
PR   17-SEP-1997;   97US-0059115P.
PR   17-SEP-1997;   97US-0059117P.
PR   17-SEP-1997;   97US-0059119P.
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PR   17-SEP-1997;   97US-0059122P.
PR   17-SEP-1997;   97US-0059184P.
PR   18-SEP-1997;   97US-0059263P.
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PR   17-OCT-1997;   97US-0062287P.
PR   21-OCT-1997;   97US-0063486P.
PR   24-OCT-1997;   97US-0062814P.
PR   24-OCT-1997;   97US-0062816P.
PR   24-OCT-1997;   97US-0063045P.
PR   24-OCT-1997;   97US-0063120P.
PR   24-OCT-1997;   97US-0063121P.
PR   24-OCT-1997;   97US-0063127P.
PR   24-OCT-1997;   97US-0063128P.
PR   27-OCT-1997;   97US-0063327P.
PR   27-OCT-1997;   97US-0063329P.
PR   28-OCT-1997;   97US-0063541P.
PR   28-OCT-1997;   97US-0063542P.
PR   28-OCT-1997;   97US-0063544P.
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PR   28-OCT-1997;   97US-0063550P.
PR   28-OCT-1997;   97US-0063564P.
PR   29-OCT-1997;   97US-0063435P.
PR   29-OCT-1997;   97US-0063704P.
PR   29-OCT-1997;   97US-0063732P.
PR   29-OCT-1997;   97US-0063734P.
PR   29-OCT-1997;   97US-0063735P.
PR   29-OCT-1997;   97US-0063738P.
PR   29-OCT-1997;   97US-0064215P.
PR   31-OCT-1997;   97US-0063870P.
PR   31-OCT-1997;   97US-0064103P.
PR   03-NOV-1997;   97US-0064248P.
PR   07-NOV-1997;   97US-0064809P.
PR   12-NOV-1997;   97US-0065186P.
PR   17-NOV-1997;   97US-0065846P.
PR   18-NOV-1997;   97US-0065693P.
PR   21-NOV-1997;   97US-0066120P.
PR   21-NOV-1997;   97US-0066364P.
PR   24-NOV-1997;   97US-0066453P.
PR   24-NOV-1997;   97US-0066466P.
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PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-743881/70.
DR P-PSDB; ADC12507.
XX
PT New secreted transmembrane PRO polypeptides and nucleic acids encoding
PT the polypeptides, useful in gene therapy, in identifying chromosomes, as
PT chromosome markers, in generating probes and in tissue typing.
XX
PS Claim 2; SEQ ID NO 262; 487pp; English.
XX
CC The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. The PRO polypeptides or
CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
CC bioreactors. These are useful for stimulating hypertrophy of neonatal
CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
CC proliferation of endothelial cells, modulating the proliferation of
CC stimulated T-lymphocytes, enhancing the survival or proliferation of
CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
CC -differentiation of chondrocytes. In particular, these are useful for
CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
CC tumours, retinal disorders or injuries (e.g. loss of sight due to
CC retinitis pigmentosum), obesity, diabetes, hyperinsulinaemia,
CC hypoinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
CC arthritis) in mammals. PRO polypeptides and their portions affect the
CC expression of genes which have a role in cell death. The polynucleotides
CC are useful in molecular biology including uses as hybridisation probes
CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
CC and DNA, for preparing PRO polypeptides, for generating transgenic
CC animals or knockout animals which are useful in the development and
CC screening of therapeutically useful reagents, as probes and for the
CC genetic analysis of individuals with genetic disorders as well as for
CC recombinantly expressing the protein and for chromosome identification.
CC The proteins are useful as molecular marker for protein electrophoresis
CC purposes, as therapeutic agents, for screening compounds to identify
CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
CC useful for tissue typing. PRO antibodies are useful for
CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
CC expression in specific cells, tissues or serum and for affinity
CC purification of PRO from recombinant cell culture or natural sources. The
CC PRO genes may also be used in gene therapy, particularly for replacing a
CC defective gene. The sequence presented is a gene encoding a PRO
CC polynucleotide of the invention.
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

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            | | | |   |||  ||||| |||   | |   |  | | | | | | ||  |   ||
Db      131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy      459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
            | |   | ||  |  | |||| || ||  | ||  ||| |
Db       71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32
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RESULT 130
ADD05061/c
ID ADD05061 standard; cDNA; 1378 BP.
XX
AC ADD05061;
XX
DT 01-JAN-2004 (first entry)
XX
DE Human secreted/transmembrane protein cDNA, #52.
XX
KW Human; gene; ss; PRO; secreted; transmembrane; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy;
KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW retinitis pigmentosum; obesity; diabete; hyperinsulinaemia;
KW hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
KW arthritis; cardiant; vulnerary; cytostatic; ophthalmological;
KW osteopathic; antiarthritic; anorectic.
XX
OS Homo sapiens.
XX
PN US2003104469-A1.

XX
PD 05-JUN-2003.
XX
PF 17-JUL-2001; 2001US-00907652.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
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PR 28-OCT-1997; 97US-0063564P.
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PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
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PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
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PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
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PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
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PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-801231/75.
DR P-PSDB; ADD05062.
XX
PT Novel isolated native PRO polypeptide useful for tissue typing,
PT modulating biological activity of cell, as molecular weight markers in
PT protein electrophoresis, for treating enterocolitis, Zollinger-Ellison
PT syndrome.
XX
PS Claim 2; SEQ ID NO 262; 474pp; English.
XX
CC The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. The PRO polypeptides or
CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
CC bioreactors. These are useful for stimulating hypertrophy of neonatal
CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
CC proliferation of endothelial cells, modulating the proliferation of
CC stimulated T-lymphocytes, enhancing the survival or proliferation of
CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
CC -differentiation of chondrocytes. In particular, these are useful for
CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
CC tumours, retinal disorders or injuries (e.g. loss of sight due to
CC retinitis pigmentosum), obesity, diabetes, hyperinsulinaemia,
CC hypoinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
CC arthritis) in mammals. PRO polypeptides and their portions affect the
CC expression of genes which have a role in cell death. The polynucleotides
CC are useful in molecular biology including uses as hybridisation probes
CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
CC and DNA, for preparing PRO polypeptides, for generating transgenic
CC animals or knockout animals which are useful in the development and
CC screening of therapeutically useful reagents, as probes and for the
CC genetic analysis of individuals with genetic disorders as well as for
CC recombinantly expressing the protein and for chromosome identification.

CC The proteins are useful as molecular marker for protein electrophoresis
CC purposes, as therapeutic agents, for screening compounds to identify
CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
CC useful for tissue typing. PRO antibodies are useful for
CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
CC expression in specific cells, tissues or serum and for affinity
CC purification of PRO from recombinant cell culture or natural sources. The
CC PRO genes may also be used in gene therapy, particularly for replacing a
CC defective gene. The sequence presented is a gene encoding a PRO
CC polypeptide of the invention.
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

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            | | | |   |||  ||||| |||   | |   |  | | | | |  | || |   ||
Db      131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy      459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
                | |   | ||  |  | |||| || ||  | ||  ||| |
Db       71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32
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RESULT 131
ADD04067/c
ID ADD04067 standard; cDNA; 1378 BP.
XX
AC ADD04067;
XX
DT 01-JAN-2004 (first entry)
XX
DE Human secreted/transmembrane protein cDNA, #52.
XX
KW Human; gene; ss; PRO; secreted; transmembrane; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy;
KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW retinitis pigmentosum; obesity; diabete; hyperinsulinaemia;
KW hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
KW arthritis; cardiant; vulnerary; cytostatic; ophthalmological;
KW osteopathic; antiarthritic; anorectic.
XX
OS Homo sapiens.
XX
PN US2003104381-A1.
XX
PD 05-JUN-2003.
XX
PF 11-JUL-2001; 2001US-00903823.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
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PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
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PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
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PR 24-OCT-1997; 97US-0063128P.
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PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
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PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
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PR 17-NOV-1997; 97US-0065846P.
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PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
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PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 18-SEP-1998; 98WO-US018824.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.

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PR   24-AUG-2000; 2000WO-US023328.
PR   18-SEP-2000; 2000US-00665350.
XX
PA   (GETH ) GENENTECH INC.
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PI   Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI   Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI   Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI   Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI   Williams PM, Wood WI;
XX
DR   WPI; 2003-801226/75.
DR   P-PSDB; ADD04068.
XX
PT   Novel isolated native PRO polypeptide useful for treating Parkinson's
PT   disease, enterocolitis, Zollinger-Ellison syndrome gastrointestinal
PT   ulceration, Alzheimer's disease, amyotrophic lateral sclerosis, Usher
PT   syndrome.
XX
PS   Claim 2; SEQ ID NO 262; 487pp; English.
XX
CC   The invention discloses isolated PRO secreted/transmembrane polypeptides
CC   and the nucleic acid encoding them. The polypeptides can be used to raise
CC   antibodies that specifically bind to the PRO polypeptide, for linking a
CC   bioactive molecule to a cell expressing a PRO protein and for modulating
CC   at least one biological activity of a cell. PRO polypeptides are useful
CC   for detecting other PRO polypeptides in a sample and for linking a
CC   bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC   polypeptide antibodies are useful for modulating the biological activity
CC   of a cell expressing PRO polypeptides. The PRO polypeptides or
CC   polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
CC   bioreactors. These are useful for stimulating hypertrophy of neonatal
CC   heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
CC   proliferation of endothelial cells, modulating the proliferation of
CC   stimulated T-lymphocytes, enhancing the survival or proliferation of
CC   retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
CC   cells, modulating glucose or FFA uptake, inducing proliferation and/or re
CC   -differentiation of chondrocytes. In particular, these are useful for
CC   detecting or treating cardiac insufficiency disorders, wounds, cancerous
CC   tumours, retinal disorders or injuries (e.g. loss of sight due to
CC   retinitis pigmentosum), obesity, diabetes, hyperinsulinaemia,
CC   hypoinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
CC   arthritis) in mammals. PRO polypeptides and their portions affect the
CC   expression of genes which have a role in cell death. The polynucleotides
CC   are useful in molecular biology including uses as hybridisation probes
CC   for cDNA library to isolate the full-length PRO cDNA or to isolate other
CC   cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
CC   and DNA, for preparing PRO polypeptides, for generating transgenic
CC   animals or knockout animals which are useful in the development and
CC   screening of therapeutically useful reagents, as probes and for the
CC   genetic analysis of individuals with genetic disorders as well as for
CC   recombinantly expressing the protein and for chromosome identification.
CC   The proteins are useful as molecular marker for protein electrophoresis
CC   purposes, as therapeutic agents, for screening compounds to identify
CC   those that mimic the PRO polypeptide (agonists) or prevent the effect of
CC   the PRO polypeptide (antagonists). The polynucleotides and proteins are
CC   useful for tissue typing. PRO antibodies are useful for
CC   immunohistochemical staining and/or assay of sample fluids. Anti-PRO
CC   antibodies are useful in diagnostic assays for PRO e.g. detecting its
CC   expression in specific cells, tissues or serum and for affinity
CC   purification of PRO from recombinant cell culture or natural sources. The
CC   PRO genes may also be used in gene therapy, particularly for replacing a
CC   defective gene. The sequence presented is a gene encoding a PRO
CC   polypeptide of the invention.
XX
SQ   Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 89;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   |  | | | | | | | ||  |   ||

Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32


RESULT 132
ADD03643/c
ID   ADD03643 standard; cDNA; 1378 BP.
XX
AC   ADD03643;
XX
DT   01-JAN-2004  (first entry)
XX
DE   Human secreted/transmembrane protein cDNA, #52.
XX
KW   Human; gene; ss; PRO; secreted; transmembrane; therapeutic;
KW   tissue typing; immunohistochemical staining; gene therapy;
KW   neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW   endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW   rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
KW   cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW   retinitis pigmentosum; obesity; diabete; hyperinsulinaemia;
KW   hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
KW-  arthritis; cardiant; vulnerary; cytostatic; ophthalmological;
KW   osteopathic; antiarthritic; anorectic.
XX
OS   Homo sapiens.
XX
PN   US2003108983-A1.
XX
PD   12-JUN-2003.
XX
PF   10-JUL-2001; 2001US-00902572.
XX
PR   17-SEP-1997;   97US-0059113P.
PR   17-SEP-1997;   97US-0059115P.
PR   17-SEP-1997;   97US-0059117P.
PR   17-SEP-1997;   97US-0059119P.
PR   17-SEP-1997;   97US-0059121P.
PR   17-SEP-1997;   97US-0059122P.
PR   17-SEP-1997;   97US-0059184P.
PR   18-SEP-1997;   97US-0059263P.
PR   18-SEP-1997;   97US-0059266P.
PR   15-OCT-1997;   97US-0062125P.
PR   17-OCT-1997;   97US-0062285P.
PR   17-OCT-1997;   97US-0062287P.
PR   21-OCT-1997;   97US-0063486P.
PR   24-OCT-1997;   97US-0062814P.
PR   24-OCT-1997;   97US-0062816P.
PR   24-OCT-1997;   97US-0063045P.
PR   24-OCT-1997;   97US-0063120P.
PR   24-OCT-1997;   97US-0063121P.
PR   24-OCT-1997;   97US-0063127P.
PR   24-OCT-1997;   97US-0063128P.
PR   27-OCT-1997;   97US-0063327P.
PR   27-OCT-1997;   97US-0063329P.
PR   28-OCT-1997;   97US-0063541P.
PR   28-OCT-1997;   97US-0063542P.
PR   28-OCT-1997;   97US-0063544P.
PR   28-OCT-1997;   97US-0063549P.
PR   28-OCT-1997;   97US-0063550P.
PR   28-OCT-1997;   97US-0063564P.
PR   29-OCT-1997;   97US-0063435P.
PR   29-OCT-1997;   97US-0063704P.
PR   29-OCT-1997;   97US-0063732P.
PR   29-OCT-1997;   97US-0063734P.
PR   29-OCT-1997;   97US-0063735P.
PR   29-OCT-1997;   97US-0063738P.
PR   29-OCT-1997;   97US-0064215P.
PR   31-OCT-1997;   97US-0063870P.
PR   31-OCT-1997;   97US-0064103P.
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PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-801268/75.
DR P-PSDB; ADD03644.
XX
PT Novel isolated native PRO polypeptide useful for tissue typing,
PT modulating biological activity of cell, as molecular weight markers in
PT protein electrophoresis, for treating enterocolitis, Zollinger-Ellison
PT syndrome.
XX
PS Claim 2; SEQ ID NO 262; 472pp; English.
XX
CC The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. The PRO polypeptides or
CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
CC bioreactors. These are useful for stimulating hypertrophy of neonatal
CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
CC proliferation of endothelial cells, modulating the proliferation of
CC stimulated T-lymphocytes, enhancing the survival or proliferation of
CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
CC -differentiation of chondrocytes. In particular, these are useful for
CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
CC tumours, retinal disorders or injuries (e.g. loss of sight due to
CC retinitis pigmentosum), obesity, diabetes, hyperinsulinaemia,
CC hypoinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
CC arthritis) in mammals. PRO polypeptides and their portions affect the
CC expression of genes which have a role in cell death. The polynucleotides
CC are useful in molecular biology including uses as hybridisation probes
CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
CC and DNA, for preparing PRO polypeptides, for generating transgenic
CC animals or knockout animals which are useful in the development and
CC screening of therapeutically useful reagents, as probes and for the
CC genetic analysis of individuals with genetic disorders as well as for
CC recombinantly expressing the protein and for chromosome identification.
CC The proteins are useful as molecular marker for protein electrophoresis
CC purposes, as therapeutic agents, for screening compounds to identify
CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
CC useful for tissue typing. PRO antibodies are useful for
CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
CC expression in specific cells, tissues or serum and for affinity
CC purification of PRO from recombinant cell culture or natural sources. The
CC PRO genes may also be used in gene therapy, particularly for replacing a
CC defective gene. The sequence presented is a gene encoding a PRO
CC polypeptide of the invention.
XX
SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

```
Qy      399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
            | | | |   |||  ||||| |||   | ||   |  | | | | | | | | |||  |
Db      131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy      459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db       71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32
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RESULT 133
ADE34895/c
ID ADE34895 standard; cDNA; 1378 BP.
XX
AC ADE34895;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human secreted/transmembrane protein cDNA, #52.
XX
KW Human; gene; ss; PRO; secreted; transmembrane; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy;
KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW endothelial cell; stimulated T-lymphocyte; retinal neuron;

KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW retinitis pigmentosum; obesity; diabete; hyperinsulinaemia;
KW hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
KW arthritis; cardiant; vulnerary; cytostatic; ophthalmological;
KW osteopathic; antiarthritic; anorectic.
XX
OS Homo sapiens.
XX
PN US2003077583-A1.
XX
PD 24-APR-2003.
XX
PF 13-JUL-2001; 2001US-00905075.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 26-NOV-1997; 97US-0066480P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-777194/73.
DR P-PSDB; ADE34896.
XX
PT New isolated PRO polypeptides e.g. PRO245 and PRO1868, useful for
PT treating e.g. Parkinson's disease, Alzheimer's disease, amyotrophic
PT lateral sclerosis, cancer, neuropathies, diabetes and psoriasis.
XX
PS Claim 2; SEQ ID NO 262; 474pp; English.
XX
CC The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. The PRO polypeptides or
CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
CC bioreactors. These are useful for stimulating hypertrophy of neonatal
CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
CC proliferation of endothelial cells, modulating the proliferation of
CC stimulated T-lymphocytes, enhancing the survival or proliferation of
CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
CC -differentiation of chondrocytes. In particular, these are useful for
CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
CC tumours, retinal disorders or injuries (e.g. loss of sight due to
CC retinitis pigmentosum), obesity, diabetes, hyperinsulinaemia,
CC hypoinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
CC arthritis) in mammals. PRO polypeptides and their portions affect the

```
CC   expression of genes which have a role in cell death. The polynucleotides
CC   are useful in molecular biology including uses as hybridisation probes
CC   for cDNA library to isolate the full-length PRO cDNA or to isolate other
CC   cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
CC   and DNA, for preparing PRO polypeptides, for generating transgenic
CC   animals or knockout animals which are useful in the development and
CC   screening of therapeutically useful reagents, as probes and for the
CC   genetic analysis of individuals with genetic disorders as well as for
CC   recombinantly expressing the protein and for chromosome identification.
CC   The proteins are useful as molecular marker for protein electrophoresis
CC   purposes, as therapeutic agents, for screening compounds to identify
CC   those that mimic the PRO polypeptide (agonists) or prevent the effect of
CC   the PRO polypeptide (antagonists). The polynucleotides and proteins are
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CC   immunohistochemical staining and/or assay of sample fluids. Anti-PRO
CC   antibodies are useful in diagnostic assays for PRO e.g. detecting its
CC   expression in specific cells, tissues or serum and for affinity
CC   purification of PRO from recombinant cell culture or natural sources. The
CC   PRO genes may also be used in gene therapy, particularly for replacing a
CC   defective gene. The sequence presented is a gene encoding a PRO
CC   polynucleotide of the invention.
XX
SQ   Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 89;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   |  | | | | |  | || |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32


RESULT 134
ADE79340/c
ID   ADE79340 standard; cDNA; 1378 BP.
XX
AC   ADE79340;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Human secreted/transmembrane protein cDNA, #52.
XX
KW   Human; gene; ss; PRO; secreted; transmembrane; therapeutic;
KW   tissue typing; immunohistochemical staining; gene therapy;
KW   neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW   endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW   rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
KW   cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW   retinitis pigmentosum; obesity; diabete; hyperinsulinaemia;
KW   hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
KW   arthritis; cardiant; vulnerary; cytostatic; ophthalmological;
KW   osteopathic; antiarthritic; anorectic.
XX
OS   Homo sapiens.
XX
PN   US2003135025-A1.
XX
PD   17-JUL-2003.
XX
PF   12-JUL-2001; 2001US-00904992.
XX
PR   17-SEP-1997;   97US-0059113P.
PR   17-SEP-1997;   97US-0059115P.
PR   17-SEP-1997;   97US-0059117P.
PR   17-SEP-1997;   97US-0059119P.
PR   17-SEP-1997;   97US-0059121P.
PR   17-SEP-1997;   97US-0059122P.
PR   17-SEP-1997;   97US-0059184P.
PR   18-SEP-1997;   97US-0059263P.
PR   18-SEP-1997;   97US-0059266P.
PR   15-OCT-1997;   97US-0062125P.
PR   17-OCT-1997;   97US-0062285P.
PR   17-OCT-1997;   97US-0062287P.
PR   21-OCT-1997;   97US-0063486P.
PR   24-OCT-1997;   97US-0062814P.
PR   24-OCT-1997;   97US-0062816P.
PR   24-OCT-1997;   97US-0063045P.
PR   24-OCT-1997;   97US-0063120P.
PR   24-OCT-1997;   97US-0063121P.
PR   24-OCT-1997;   97US-0063127P.
PR   24-OCT-1997;   97US-0063128P.
PR   27-OCT-1997;   97US-0063327P.
PR   27-OCT-1997;   97US-0063329P.
PR   28-OCT-1997;   97US-0063541P.
PR   28-OCT-1997;   97US-0063542P.
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PR   29-OCT-1997;   97US-0063734P.
PR   29-OCT-1997;   97US-0063735P.
PR   29-OCT-1997;   97US-0063738P.
PR   29-OCT-1997;   97US-0064215P.
PR   31-OCT-1997;   97US-0063870P.
PR   31-OCT-1997;   97US-0064103P.
PR   03-NOV-1997;   97US-0064248P.
PR   07-NOV-1997;   97US-0064809P.
PR   12-NOV-1997;   97US-0065186P.
PR   17-NOV-1997;   97US-0065846P.
PR   18-NOV-1997;   97US-0065693P.
PR   21-NOV-1997;   97US-0066120P.
PR   21-NOV-1997;   97US-0066364P.
PR   24-NOV-1997;   97US-0066453P.
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PR   24-NOV-1997;   97US-0066511P.
PR   24-NOV-1997;   97US-0066770P.
PR   24-NOV-1997;   97US-0066772P.
PR   25-NOV-1997;   97US-0066840P.
PR   12-DEC-1997;   97US-0069425P.
PR   04-JUN-1998;   98US-0088026P.
PR   10-SEP-1998;   98US-0099803P.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98US-0100262P.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98US-0100858P.
PR   17-SEP-1998;   98WO-US019437.
PR   13-OCT-1998;   98US-0104080P.
PR   20-NOV-1998;   98US-0109304P.
PR   01-DEC-1998;   98WO-US025108.
PR   22-DEC-1998;   98US-0113296P.
PR   07-JUL-1999;   99US-0143048P.
PR   26-JUL-1999;   99US-0145698P.
PR   28-JUL-1999;   99US-0146222P.
PR   08-SEP-1999;   99WO-US020594.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   01-DEC-1999;   99WO-US028301.
PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   20-DEC-1999;   99WO-US030999.
PR   05-JAN-2000; 2000WO-US000219.
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PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2004-031331/03.
DR P-PSDB; ADE79341.
XX
PT New nucleic acid encoding a PRO polypeptide, for producing a recombinant
PT PRO polypeptide and for treating e.g. cancer, infertility, kidney
PT disorders, and cardiac disfunctions.
XX
PS Claim 2; SEQ ID NO 262; 473pp; English.
XX
CC The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
CC bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. The PRO polypeptides or
CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
CC bioreactors. These are useful for stimulating hypertrophy of neonatal
CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
CC proliferation of endothelial cells, modulating the proliferation of
CC stimulated T-lymphocytes, enhancing the survival or proliferation of
CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re
CC -differentiation of chondrocytes. In particular, these are useful for
CC detecting or treating cardiac insufficiency disorders, wounds, cancerous
CC tumours, retinal disorders or injuries (e.g. loss of sight due to
CC retinitis pigmentosum), obesity, diabetes, hyperinsulinaemia,
CC hypoinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
CC arthritis) in mammals. PRO polypeptides and their portions affect the
CC expression of genes which have a role in cell death. The polynucleotides
CC are useful in molecular biology including uses as hybridisation probes
CC for cDNA library to isolate the full-length PRO cDNA or to isolate other
CC cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
CC and DNA, for preparing PRO polypeptides, for generating transgenic
CC animals or knockout animals which are useful in the development and
CC screening of therapeutically useful reagents, as probes and for the
CC genetic analysis of individuals with genetic disorders as well as for
CC recombinantly expressing the protein and for chromosome identification.
CC The proteins are useful as molecular marker for protein electrophoresis
CC purposes, as therapeutic agents, for screening compounds to identify
CC those that mimic the PRO polypeptide (agonists) or prevent the effect of
CC the PRO polypeptide (antagonists). The polynucleotides and proteins are
CC useful for tissue typing. PRO antibodies are useful for
CC immunohistochemical staining and/or assay of sample fluids. Anti-PRO
CC antibodies are useful in diagnostic assays for PRO e.g. detecting its
CC expression in specific cells, tissues or serum and for affinity
CC purification of PRO from recombinant cell culture or natural sources. The
CC PRO genes may also be used in gene therapy, particularly for replacing a
CC defective gene. The sequence presented is a gene encoding a PRO
CC polynucleotide of the invention.
XX

SQ Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.6; DB 1; Length 1378;
Best Local Similarity 51.0%; Pred. No. 89;
Matches 51; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

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Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
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Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32
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RESULT 135
ADE79764/c
ID ADE79764 standard; cDNA; 1378 BP.
XX
AC ADE79764;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human secreted/transmembrane protein cDNA, #52.
XX
KW Human; gene; ss; PRO; secreted; transmembrane; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy;
KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW retinitis pigmentosum; obesity; diabete; hyperinsulinaemia;
KW hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
KW arthritis; cardiant; vulnerary; cytostatic; ophthalmological;
KW osteopathic; antiarthritic; anorectic.
XX
OS Homo sapiens.
XX
PN US2003130489-A1.
XX
PD 10-JUL-2003.
XX
PF 11-JUL-2001; 2001US-00903806.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
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PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.

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PR   29-OCT-1997;   97US-0063704P.
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PR   29-OCT-1997;   97US-0063734P.
PR   29-OCT-1997;   97US-0063735P.
PR   29-OCT-1997;   97US-0063738P.
PR   29-OCT-1997;   97US-0064215P.
PR   31-OCT-1997;   97US-0063870P.
PR   31-OCT-1997;   97US-0064103P.
PR   03-NOV-1997;   97US-0064248P.
PR   07-NOV-1997;   97US-0064809P.
PR   12-NOV-1997;   97US-0065186P.
PR   17-NOV-1997;   97US-0065846P.
PR   18-NOV-1997;   97US-0065693P.
PR   21-NOV-1997;   97US-0066120P.
PR   21-NOV-1997;   97US-0066364P.
PR   24-NOV-1997;   97US-0066453P.
PR   24-NOV-1997;   97US-0066466P.
PR   24-NOV-1997;   97US-0066511P.
PR   24-NOV-1997;   97US-0066770P.
PR   24-NOV-1997;   97US-0066772P.
PR   25-NOV-1997;   97US-0066840P.
PR   12-DEC-1997;   97US-0069425P.
PR   04-JUN-1998;   98US-0088026P.
PR   10-SEP-1998;   98US-0099803P.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98US-0100262P.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98US-0100858P.
PR   17-SEP-1998;   98WO-US019437.
PR   13-OCT-1998;   98US-0104080P.
PR   20-NOV-1998;   98US-0109304P.
PR   01-DEC-1998;   98WO-US025108.
PR   22-DEC-1998;   98US-0113296P.
PR   07-JUL-1999;   99US-0143048P.
PR   26-JUL-1999;   99US-0145698P.
PR   28-JUL-1999;   99US-0146222P.
PR   08-SEP-1999;   99WO-US020594.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   01-DEC-1999;   99WO-US028301.
PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   20-DEC-1999;   99WO-US030999.
PR   05-JAN-2000; 2000WO-US000219.
PR   11-FEB-2000; 2000WO-US003565.
PR   22-FEB-2000; 2000WO-US004414.
PR   24-FEB-2000; 2000WO-US005004.
PR   02-MAR-2000; 2000WO-US005841.
PR   20-MAR-2000; 2000WO-US007377.
PR   30-MAR-2000; 2000WO-US008439.
PR   22-MAY-2000; 2000WO-US014042.
PR   02-JUN-2000; 2000WO-US015264.
PR   28-JUL-2000; 2000WO-US020710.
PR   24-AUG-2000; 2000WO-US023328.
PR   18-SEP-2000; 2000US-00665350.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi A,  Botstein D,  Desnoyers L,  Eaton DL,  Ferrara N;
PI   Filvaroff E,  Fong S,  Gao W,  Gerber H,  Gerritsen ME,  Goddard A;
PI   Godowski PJ,  Grimaldi JC,  Gurney AL,  Hillan KJ,  Kljavin IJ;
PI   Mather JP,  Pan J,  Paoni NF,  Roy MA,  Stewart TA,  Tumas D;
PI   Williams PM,  Wood WI;
XX
DR   WPI; 2004-020353/02.
DR   P-PSDB; ADE79765.
XX
PT   New PRO nucleic acid, useful for manufacturing a medicament for
PT   diagnosing or treating tumor or for tissue typing.
XX
PS   Claim 2; SEQ ID NO 262; 480pp; English.
XX
CC   The invention discloses isolated PRO secreted/transmembrane polypeptides
CC   and the nucleic acid encoding them. The polypeptides can be used to raise
CC   antibodies that specifically bind to the PRO polypeptide, for linking a
CC   bioactive molecule to a cell expressing a PRO protein and for modulating
CC   at least one biological activity of a cell. PRO polypeptides are useful
CC   for detecting other PRO polypeptides in a sample and for linking a
CC   bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC   polypeptide antibodies are useful for modulating the biological activity
CC   of a cell expressing PRO polypeptides. The PRO polypeptides or
CC   polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
CC   bioreactors. These are useful for stimulating hypertrophy of neonatal
CC   heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
CC   proliferation of endothelial cells, modulating the proliferation of
CC   stimulated T-lymphocytes, enhancing the survival or proliferation of
CC   retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
CC   cells, modulating glucose or FFA uptake, inducing proliferation and/or re
CC   -differentiation of chondrocytes. In particular, these are useful for
CC   detecting or treating cardiac insufficiency disorders, wounds, cancerous
CC   tumours, retinal disorders or injuries (e.g. loss of sight due to
CC   retinitis pigmentosum), obesity, diabetes, hyperinsulinaemia,
CC   hypoinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
CC   arthritis) in mammals. PRO polypeptides and their portions affect the
CC   expression of genes which have a role in cell death. The polynucleotides
CC   are useful in molecular biology including uses as hybridisation probes
CC   for cDNA library to isolate the full-length PRO cDNA or to isolate other
CC   cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
CC   and DNA, for preparing PRO polypeptides, for generating transgenic
CC   animals or knockout animals which are useful in the development and
CC   screening of therapeutically useful reagents, as probes and for the
CC   genetic analysis of individuals with genetic disorders as well as for
CC   recombinantly expressing the protein and for chromosome identification.
CC   The proteins are useful as molecular marker for protein electrophoresis
CC   purposes, as therapeutic agents, for screening compounds to identify
CC   those that mimic the PRO polypeptide (agonists) or prevent the effect of
CC   the PRO polypeptide (antagonists). The polynucleotides and proteins are
CC   useful for tissue typing. PRO antibodies are useful for
CC   immunohistochemical staining and/or assay of sample fluids. Anti-PRO
CC   antibodies are useful in diagnostic assays for PRO e.g. detecting its
CC   expression in specific cells, tissues or serum and for affinity
CC   purification of PRO from recombinant cell culture or natural sources. The
CC   PRO genes may also be used in gene therapy, particularly for replacing a
CC   defective gene. The sequence presented is a gene encoding a PRO
CC   polynucleotide of the invention.
XX
SQ   Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 89;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | | |  | | | | | | | |||  |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32


RESULT 136
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ID   ADE73440 standard; cDNA; 1378 BP.
XX
AC   ADE73440;
XX
DT   29-JAN-2004  (first entry)
XX
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DE Human secreted/transmembrane protein cDNA, #52.
XX
KW Human; gene; ss; PRO; secreted; transmembrane; therapeutic;
KW tissue typing; immunohistochemical staining; gene therapy;
KW neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW retinitis pigmentosum; obesity; diabete; hyperinsulinaemia;
KW hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
KW arthritis; cardiant; vulnerary; cytostatic; ophthalmological;
KW osteopathic; antiarthritic; anorectic.
XX
OS Homo sapiens.
XX
PN US2003129592-A1.
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PD 10-JUL-2003.
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PF 13-JUL-2001; 2001US-00905449.
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PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
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PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
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PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
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PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 25-NOV-1997; 97US-0066840P.
PR 12-DEC-1997; 97US-0069425P.
PR 04-JUN-1998; 98US-0088026P.
PR 10-SEP-1998; 98US-0099803P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98US-0100262P.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100858P.
PR 17-SEP-1998; 98WO-US019437.
PR 13-OCT-1998; 98US-0104080P.
PR 20-NOV-1998; 98US-0109304P.
PR 01-DEC-1998; 98WO-US025108.
PR 22-DEC-1998; 98US-0113296P.
PR 07-JUL-1999; 99US-0143048P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
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PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2004-020333/02.
DR P-PSDB; ADE73441.
XX
PT New nucleic acids encoding polypeptides designated PRO have sequence
PT identity to various secreted proteins and transmembrane proteins and are
PT useful in molecular techniques and as therapeutic agents.
XX
PS Claim 2; SEQ ID NO 262; 474pp; English.
XX
CC The invention discloses isolated PRO secreted/transmembrane polypeptides
CC and the nucleic acid encoding them. The polypeptides can be used to raise
CC antibodies that specifically bind to the PRO polypeptide, for linking a
CC bioactive molecule to a cell expressing a PRO protein and for modulating
CC at least one biological activity of a cell. PRO polypeptides are useful
CC for detecting other PRO polypeptides in a sample and for linking a
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CC polypeptide antibodies are useful for modulating the biological activity
CC of a cell expressing PRO polypeptides. The PRO polypeptides or
CC polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
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CC heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
CC proliferation of endothelial cells, modulating the proliferation of
CC stimulated T-lymphocytes, enhancing the survival or proliferation of
CC retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
CC cells, modulating glucose or FFA uptake, inducing proliferation and/or re

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CC   -differentiation of chondrocytes. In particular, these are useful for
CC   detecting or treating cardiac insufficiency disorders, wounds, cancerous
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CC   retinitis pigmentosum), obesity, diabetes, hyperinsulinaemia,
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CC   for cDNA library to isolate the full-length PRO cDNA or to isolate other
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CC   purification of PRO from recombinant cell culture or natural sources. The
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CC   defective gene. The sequence presented is a gene encoding a PRO
CC   polypeptide of the invention.
XX
SQ   Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 89;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   |  | | | | |  | || |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32


RESULT 137
ADE73975/c
ID   ADE73975 standard; cDNA; 1378 BP.
XX
AC   ADE73975;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Human secreted/transmembrane protein cDNA, #52.
XX
KW   Human; gene; ss; PRO; secreted; transmembrane; therapeutic;
KW   tissue typing; immunohistochemical staining; gene therapy;
KW   neonatal heart; vascular endothelial growth factor; VEGF; proliferation;
KW   endothelial cell; stimulated T-lymphocyte; retinal neuron;
KW   rod photoreceptor cell; c-fos; glucose; FFA; chondrocyte;
KW   cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
KW   retinitis pigmentosum; obesity; diabete; hyperinsulinaemia;
KW   hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
KW   arthritis; cardiant; vulnerary; cytostatic; ophthalmological;
KW   osteopathic; antiarthritic; anorectic.
XX
OS   Homo sapiens.
XX
PN   US2003148370-A1.
XX
PD   07-AUG-2003.
XX
PF   13-JUL-2001; 2001US-00904838.
XX
PR   17-SEP-1997;   97US-0059113P.
PR   17-SEP-1997;   97US-0059115P.
PR   17-SEP-1997;   97US-0059117P.
PR   17-SEP-1997;   97US-0059119P.
PR   17-SEP-1997;   97US-0059121P.
PR   17-SEP-1997;   97US-0059122P.
PR   17-SEP-1997;   97US-0059184P.
PR   18-SEP-1997;   97US-0059263P.
PR   18-SEP-1997;   97US-0059266P.
PR   15-OCT-1997;   97US-0062125P.
PR   17-OCT-1997;   97US-0062285P.
PR   17-OCT-1997;   97US-0062287P.
PR   21-OCT-1997;   97US-0063486P.
PR   24-OCT-1997;   97US-0062814P.
PR   24-OCT-1997;   97US-0062816P.
PR   24-OCT-1997;   97US-0063045P.
PR   24-OCT-1997;   97US-0063120P.
PR   24-OCT-1997;   97US-0063121P.
PR   24-OCT-1997;   97US-0063127P.
PR   24-OCT-1997;   97US-0063128P.
PR   27-OCT-1997;   97US-0063327P.
PR   27-OCT-1997;   97US-0063329P.
PR   28-OCT-1997;   97US-0063541P.
PR   28-OCT-1997;   97US-0063542P.
PR   28-OCT-1997;   97US-0063544P.
PR   28-OCT-1997;   97US-0063549P.
PR   28-OCT-1997;   97US-0063550P.
PR   28-OCT-1997;   97US-0063564P.
PR   29-OCT-1997;   97US-0063435P.
PR   29-OCT-1997;   97US-0063704P.
PR   29-OCT-1997;   97US-0063732P.
PR   29-OCT-1997;   97US-0063734P.
PR   29-OCT-1997;   97US-0063735P.
PR   29-OCT-1997;   97US-0063738P.
PR   29-OCT-1997;   97US-0064215P.
PR   31-OCT-1997;   97US-0063870P.
PR   31-OCT-1997;   97US-0064103P.
PR   03-NOV-1997;   97US-0064248P.
PR   07-NOV-1997;   97US-0064809P.
PR   12-NOV-1997;   97US-0065186P.
PR   17-NOV-1997;   97US-0065846P.
PR   18-NOV-1997;   97US-0065693P.
PR   21-NOV-1997;   97US-0066120P.
PR   21-NOV-1997;   97US-0066364P.
PR   24-NOV-1997;   97US-0066453P.
PR   24-NOV-1997;   97US-0066466P.
PR   24-NOV-1997;   97US-0066511P.
PR   24-NOV-1997;   97US-0066770P.
PR   24-NOV-1997;   97US-0066772P.
PR   25-NOV-1997;   97US-0066840P.
PR   12-DEC-1997;   97US-0069425P.
PR   04-JUN-1998;   98US-0088026P.
PR   10-SEP-1998;   98US-0099803P.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98US-0100262P.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98US-0100858P.
PR   17-SEP-1998;   98WO-US019437.
PR   13-OCT-1998;   98US-0104080P.
PR   20-NOV-1998;   98US-0109304P.
PR   01-DEC-1998;   98WO-US025108.
PR   22-DEC-1998;   98US-0113296P.
PR   07-JUL-1999;   99US-0143048P.
PR   26-JUL-1999;   99US-0145698P.
PR   28-JUL-1999;   99US-0146222P.
PR   08-SEP-1999;   99WO-US020594.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   01-DEC-1999;   99WO-US028301.
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PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   20-DEC-1999;   99WO-US030999.
PR   05-JAN-2000; 2000WO-US000219.
PR   11-FEB-2000; 2000WO-US003565.
PR   22-FEB-2000; 2000WO-US004414.
PR   24-FEB-2000; 2000WO-US005004.
PR   02-MAR-2000; 2000WO-US005841.
PR   20-MAR-2000; 2000WO-US007377.
PR   30-MAR-2000; 2000WO-US008439.
PR   22-MAY-2000; 2000WO-US014042.
PR   02-JUN-2000; 2000WO-US015264.
PR   28-JUL-2000; 2000WO-US020710.
PR   24-AUG-2000; 2000WO-US023328.
PR   18-SEP-2000; 2000US-00665350.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi A,  Botstein D,  Desnoyers L,  Eaton DL,  Ferrara N;
PI   Filvaroff E,  Fong S,  Gao W,  Gerber H,  Gerritsen ME,  Goddard A;
PI   Godowski PJ,  Grimaldi JC,  Gurney AL,  Hillan KJ,  Kljavin IJ;
PI   Mather JP,  Pan J,  Paoni NF,  Roy MA,  Stewart TA,  Tumas D;
PI   Williams PM,  Wood WI;
XX
DR   WPI; 2004-020440/02.
DR   P-PSDB; ADE73976.
XX
PT   Isolated secreted and transmembrane PRO nucleic acids and the proteins
PT   they encode, e.g. PRO245, PRO269 and PRO1868, useful for preventing,
PT   diagnosing and treating e.g. disorders relating to blood coagulation.
XX
PS   Claim 2; SEQ ID NO 262; 1pp; English.
XX
CC   The invention discloses isolated PRO secreted/transmembrane polypeptides
CC   and the nucleic acid encoding them. The polypeptides can be used to raise
CC   antibodies that specifically bind to the PRO polypeptide, for linking a
CC   bioactive molecule to a cell expressing a PRO protein and for modulating
CC   at least one biological activity of a cell. PRO polypeptides are useful
CC   for detecting other PRO polypeptides in a sample and for linking a
CC   bioactive molecule to a cell expressing a PRO polypeptide. The PRO
CC   polypeptide antibodies are useful for modulating the biological activity
CC   of a cell expressing PRO polypeptides. The PRO polypeptides or
CC   polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or
CC   bioreactors. These are useful for stimulating hypertrophy of neonatal
CC   heart, inhibiting vascular endothelial growth factor (VEGF)-stimulated
CC   proliferation of endothelial cells, modulating the proliferation of
CC   stimulated T-lymphocytes, enhancing the survival or proliferation of
CC   retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial
CC   cells, modulating glucose or FFA uptake, inducing proliferation and/or re
CC   -differentiation of chondrocytes. In particular, these are useful for
CC   detecting or treating cardiac insufficiency disorders, wounds, cancerous
CC   tumours, retinal disorders or injuries (e.g. loss of sight due to
CC   retinitis pigmentosum), obesity, diabetes, hyperinsulinaemia,
CC   hypoinsulinaemia, or bone or cartilage disorders (e.g. sports injuries or
CC   arthritis) in mammals. PRO polypeptides and their portions affect the
CC   expression of genes which have a role in cell death. The polynucleotides
CC   are useful in molecular biology including uses as hybridisation probes
CC   for cDNA library to isolate the full-length PRO cDNA or to isolate other
CC   cDNAs, in chromosome and gene mapping, in the generation of antisense RNA
CC   and DNA, for preparing PRO polypeptides, for generating transgenic
CC   animals or knockout animals which are useful in the development and
CC   screening of therapeutically useful reagents, as probes and for the
CC   genetic analysis of individuals with genetic disorders as well as for
CC   recombinantly expressing the protein and for chromosome identification.
CC   The proteins are useful as molecular marker for protein electrophoresis
CC   purposes, as therapeutic agents, for screening compounds to identify
CC   those that mimic the PRO polypeptide (agonists) or prevent the effect of
CC   the PRO polypeptide (antagonists). The polynucleotides and proteins are
CC   useful for tissue typing. PRO antibodies are useful for
CC   immunohistochemical staining and/or assay of sample fluids. Anti-PRO
CC   antibodies are useful in diagnostic assays for PRO e.g. detecting its
CC   expression in specific cells, tissues or serum and for affinity
CC   purification of PRO from recombinant cell culture or natural sources. The
CC   PRO genes may also be used in gene therapy, particularly for replacing a
CC   defective gene. The sequence presented is a gene encoding a PRO
CC   polypeptide of the invention.
XX
SQ   Sequence 1378 BP; 235 A; 461 C; 412 G; 270 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 21.6;  DB 1;  Length 1378;
  Best Local Similarity   51.0%;  Pred. No. 89;
  Matches   51;  Conservative    0;  Mismatches   49;  Indels    0;  Gaps    0;

Qy        399 TTGCCTCTTCCAGGTGCAGGCAGGGCCATGGCTCTGGTGATCACTCCTCTAGTGAAAGGT 458
              | | | |   |||  ||||| |||   | |   |  |  | | | |  | || |   ||
Db        131 TCGACGCCAGCAGCAGCAGGGAGGTGAAGGTGCCGAGACAGCCCCCACCCAGGGCTGGGG 72

Qy        459 GGGGGTCTGAGGCTCCAATGGTTGTTGATGTGGTAGAGTA 498
              | |   | ||  |  | |||| || ||  | ||  ||| |
Db         71 GCGCTCCAGAAACCACCATGGCTGGTGGGGCGGGGGAGCA 32


RESULT 138
ABX14193/c
ID   ABX14193 standard; DNA; 6098 BP.
XX
AC   ABX14193;
XX
DT   11-MAR-2003  (first entry)
XX
DE   Plasmid pLN174 for expressing human coagulation Factor VII.
XX
KW   Human; coagulation; Factor VII; Factor VIIa; blood coagulation;
KW   fibrin clot; haemostatic; tissue factor; zymogen; Factor IX; Factor X;
KW   prothrombin; thrombin; Factor V; Factor VIII; fibrinogen; fibrin;
KW   plasma factor; bleeding episode; haemophilia A; haemophilia B; thrombus;
KW   intimal hyperplasia; restenosis; cardiogenic embolism; stroke;
KW   platelet deposition; percutaneous transdermal coronary angioplasty; PTCA;
KW   cancer; tumour; angiogenesis; ischaemia; reperfusion; thrombolysis;
KW   rheumatoid arthritis; arteriosclerosis; inflammation; septic shock;
KW   hypotension; adult respiratory distress syndrome; ARDS;
KW   myocardial infarction; vasotropic; cerebroprotective; antibacterial;
KW   immunosuppressive; cardiant; gene therapy; ds; pLN174.
XX
OS   Homo sapiens.
OS   Unidentified.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   CDS             285. .1505
FT                   /*tag= a
FT                   /product= "Coagulation Factor VII"
FT                   /partial
FT                   /transl_except= (pos:300. .305,aa:Xaa-Xaa)
FT                   /transl_except= (pos:324. .326,aa:Xaa)
FT                   /transl_except= (pos:330. .332,aa:Xaa)
FT                   /transl_except= (pos:339. .344,aa:Xaa-Xaa)
FT                   /transl_except= (pos:357. .362,aa:Xaa-Xaa)
FT                   /transl_except= (pos:369. .371,aa:Xaa)
FT                   /transl_except= (pos:387. .389,aa:Xaa)
FT                   /note= "No start codon shown. Xaa = gamma carboxylated
FT                   glutamic acid"
XX
PN   WO200277218-A1.
XX
PD   03-OCT-2002.
XX
PF   21-MAR-2002; 2002WO-DK000189.
XX
PR   22-MAR-2001; 2001DK-00000477.
XX
PA   (NOVO ) NOVO NORDISK AS.
XX
PI   Persson E;
```

```
XX
DR   WPI; 2003-058374/05.
DR   P-PSDB; ABG73119.
XX
PT   Novel factor VII polypeptide, its derivatives useful for preparing
PT   medicament for treating bleeding episodes, or for enhancing normal
PT   hemostatic system, especially for treating hemophilia.
XX
PS   Disclosure; Page 82-85; 96pp; English.
XX
CC   The invention discloses a human factor VII polypeptide, or a variant or
CC   derivative of it, where an amino acid has been modified. This change
CC   results in a polypeptide with the same or an increased activity when
CC   compared to recombinant wild type human Factor VIIa. Blood coagulation
CC   consists of a complex interaction of various blood components that
CC   eventually give rise to a fibrin clot. Initiation of the haemostatic
CC   process is mediated by the formation of a complex between tissue factor
CC   and Factor VIIa (the active form of the Factor VII zymogen). This complex
CC   activates Factors IX and X, converting prothrombin to thrombin, which
CC   activates Factors V and VIII leading to a full thrombin burst. The
CC   thrombin converts fibrinogen to fibrin resulting in formation of a fibrin
CC   clot. The Factor VII zymogen, or its derivative, can be modified in its
CC   catalytic centre to inhibit the ability of the Factor VII polypeptide to
CC   activate plasma factor X or IX. The factor VII derivative is useful for
CC   preparing a medicament for the treatment of bleeding episodes, for the
CC   enhancement of the normal haemostatic system, especially for the
CC   treatment of haemophilia A or B and for inhibiting thrombus formation.
CC   The inactivated factor VII derivatives are useful for treating intimal
CC   hyperplasia, restenosis, cardiogenic emboli, platelet deposition
CC   disorders, percutaneous transdermal coronary angioplasty (PTCA), stroke,
CC   cancer, tumour metastasis, angiogenesis, ischaemia/reperfusion,
CC   rheumatoid arthritis, thrombolysis, arteriosclerosis, acute and chronic
CC   indications, such as inflammation, septic shock, hypotension, adult
CC   respiratory distress syndrome (ARDS) and myocardial infarction. The
CC   sequence presented is the plasmid, pLN174, which expresses the
CC   inactivated human coagulation Factor VII polypeptide
XX
SQ   Sequence 6098 BP; 1413 A; 1587 C; 1623 G; 1475 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 21.6;  DB 1;  Length 6098;
  Best Local Similarity   52.2%;  Pred. No. 1.1e+02;
  Matches   48;  Conservative    0;  Mismatches   44;  Indels    0;  Gaps    0;

Qy        144 ATAATGCTCTTTATGTTGTCCAGTGTATTTTTACACTGTTGTTTACCCATCTCTTCCTCC 203
              ||  | |    |  ||   ||||||     | | || |  | ||  |||||  ||  || ||
Db       2951 ATCTTACCGCTGTTGAGATCCAGTTCGATGTAACCCACTCGTGCACCCAACTGATCTTCA 2892

Qy        204 AATTGTACAGATGAATCCAGTGTTTCAGGGGG 235
                | |     |   |||| ||||| ||| |
Db       2891 GCATCTTTTACTTTCACCAGCGTTTCTGGGTG 2860


RESULT 139
AAV28290
ID   AAV28290 standard; cDNA; 283 BP.
XX
AC   AAV28290;
XX
DT   24-NOV-1998  (first entry)
XX
DE   Galanin receptor GALR2 DNA probe.
XX
KW   Galanin receptor; GALR2; rat; ligand; obesity; anorexia; pain;
KW   cognitive disorder; therapy; probe; ss.
XX
OS   Rattus sp.
XX
PN   WO9829440-A1.
XX
PD   09-JUL-1998.
XX
PF   18-DEC-1997;   97WO-US023891.
XX
PR   27-DEC-1996;   96US-0033851P.
XX
PA   (MERI ) MERCK & CO INC.
PA   (UYTE-) UNIV TEXAS HEALTH SCI SAN ANTONIO.
XX
PI   Tan CP,  Kolakowski LF;
XX
DR   WPI; 1998-388038/33.
DR   P-PSDB; AAW61461.
XX
PT   New mouse galanin receptor, GALR2, - useful to identify agonists and
PT   antagonists to treat conditions involving galanin, e.g. for treating
PT   obesity, pain or cognitive disorders.
XX
PS   Example 1; Fig 6; 56pp; English.
XX
CC   This PCR fragment was used as a probe to screen a rat hypothalamus cDNA
CC   library. 2 Independent clones, named 27A (see AAV28288) and 16.6, were
CC   obtained. Clone 27A codes for a novel full-length rat galanin receptor,
CC   designated GALR2 (see AAW61461). The invention provides methods for
CC   identifying ligands particular to mouse GALR2 (see AAW61463). Such
CC   ligands may be useful therapeutically e.g. to treat obesity or cognitive
CC   disorders involving excess galanin or to treat pain or anorexia involving
CC   insufficient galanin
XX
SQ   Sequence 283 BP; 27 A; 116 C; 84 G; 56 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 21.4;  DB 1;  Length 283;
  Best Local Similarity   61.8%;  Pred. No. 62;
  Matches   34;  Conservative    0;  Mismatches   21;  Indels    0;  Gaps    0;

Qy        600 TGGGGCTGCTGCCTTTCTCCCTGTCTGATTCCTAGGGTGAGGGTTACCACTGCTC 654
              | |||| |||||  | |  ||||||     | |  ||| ||||| | |  || | |
Db        112 TCGGGCCGCTGCTCTGCCGCCTGTCCCTCTACGTGGGCGAGGGCTGCACCTACGC 166


RESULT 140
AAV32651
ID   AAV32651 standard; cDNA; 283 BP.
XX
AC   AAV32651;
XX
DT   24-NOV-1998  (first entry)
XX
DE   Galanin receptor GALR2 DNA probe.
XX
KW   Galanin receptor; GALR2; rat; ligand; obesity; anorexia; pain;
KW   cognitive disorder; therapy; probe; ss.
XX
OS   Rattus sp.
XX
PN   WO9829439-A1.
XX
PD   09-JUL-1998.
XX
PF   18-DEC-1997;   97WO-US023890.
XX
PR   27-DEC-1996;   96US-0033851P.
XX
PA   (MERI ) MERCK & CO INC.
XX
PI   Tan C,  Sullivan K;
XX
DR   WPI; 1998-388037/33.
XX
PT   New galanin receptor, GALR2 - useful, e.g. to identify agonists and
PT   antagonists, therapeutically to treat conditions involving excess or
PT   insufficient galanin such as obesity.
XX
PS   Example 1; Fig 6; 57pp; English.
XX
CC   This PCR fragment was used as a probe to screen a rat hypothalamus cDNA
CC   library. 2 Independent clones, named 27A (see AAV32648) and 16.6, were
```

```
CC   obtained. Clone 27A codes for a novel full-length rat galanin receptor,
CC   designated GALR2 (see AAW49002). The invention provides methods for
CC   identifying ligands particular to GALR2. Such ligands may be useful
CC   therapeutically e.g. to treat obesity or cognitive disorders involving
CC   excess galanin or to treat pain or anorexia involving insufficient
CC   galanin
XX
SQ   Sequence 283 BP; 27 A; 116 C; 84 G; 56 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 21.4;  DB 1;  Length 283;
  Best Local Similarity   61.8%;  Pred. No. 62;
  Matches   34;  Conservative    0;  Mismatches   21;  Indels    0;  Gaps    0;

Qy        600 TGGGGCTGCTGCCTTTCTCCCTGTCTGATTCCTAGGGTGAGGGTTACCACTGCTC 654
              | |||| |||||  | |  ||||||    | |  ||| ||||| | |  || | |
Db        112 TCGGGCCGCTGCTCTGCCGCCTGTCCCTCTACGTGGGCGAGGGCTGCACCTACGC 166


RESULT 141
AAV44930
ID   AAV44930 standard; cDNA; 283 BP.
XX
AC   AAV44930;
XX
DT   24-NOV-1998  (first entry)
XX
DE   Galanin receptor GALR2 DNA probe.
XX
KW   Galanin receptor; GALR2; rat; ligand; obesity; anorexia; pain;
KW   cognitive disorder; therapy; probe; ss.
XX
OS   Rattus sp.
XX
PN   WO9829441-A1.
XX
PD   09-JUL-1998.
XX
PF   18-DEC-1997;   97WO-US023892.
XX
PR   27-DEC-1996;   96US-0033851P.
XX
PA   (MERI ) MERCK & CO INC.
PA   (UYTE-) UNIV TEXAS HEALTH SCI CENT SAN ANTONI.
PA   (UTOR ) UNIV TORONTO.
XX
PI   Sullivan K,  Kolakowski LF,  Odowd B;
XX
DR   WPI; 1998-388039/33.
XX
PT   New human galanin receptor, GALR2, - useful to identify agonists and
PT   antagonists to treat conditions involving galanin, e.g. for treatment of
PT   obesity or cognitive disorders.
XX
PS   Example 1; Fig 6; 57pp; English.
XX
CC   This PCR fragment was used as a probe to screen a rat hypothalamus cDNA
CC   library. 2 Independent clones, named 27A (see AAV44929) and 16.6, were
CC   obtained. Clone 27A codes for a novel full-length rat galanin receptor,
CC   designated GALR2 (see AAW61385). The invention provides methods for
CC   identifying ligands particular to human GALR2 (see AAW61386). Such
CC   ligands may be useful therapeutically e.g. to treat obesity or cognitive
CC   disorders involving excess galanin or to treat pain or anorexia involving
CC   insufficient galanin
XX
SQ   Sequence 283 BP; 27 A; 116 C; 84 G; 56 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 21.4;  DB 1;  Length 283;
  Best Local Similarity   61.8%;  Pred. No. 62;
  Matches   34;  Conservative    0;  Mismatches   21;  Indels    0;  Gaps    0;

Qy        600 TGGGGCTGCTGCCTTTCTCCCTGTCTGATTCCTAGGGTGAGGGTTACCACTGCTC 654
              | |||| |||||  | |  ||||||    | |  ||| ||||| | |  || | |
Db        112 TCGGGCCGCTGCTCTGCCGCCTGTCCCTCTACGTGGGCGAGGGCTGCACCTACGC 166


RESULT 142
ABK14060
ID   ABK14060 standard; cDNA; 283 BP.
XX
AC   ABK14060;
XX
DT   08-MAY-2002  (first entry)
XX
DE   Rat galanin receptor 2 (GALR2) cDNA probe.
XX
KW   Galanin receptor 2; GALR2; probe; ss; rat; obesity; pain; anorectic;
KW   cognitive disorder; analgesic; neuroprotective.
XX
OS   Rattus sp.
XX
PN   US6337206-B1.
XX
PD   08-JAN-2002.
XX
PF   18-DEC-1997;   97US-00993424.
XX
PR   18-DEC-1997;   97US-00993424.
XX
PA   (MERI ) MERCK & CO INC.
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Tan C,  Kolakowski LF;
XX
DR   WPI; 2002-163241/21.
XX
PT   New nucleic acid encoding mouse galanin receptor 2, useful in assays for
PT   identifying galanin receptor 2 ligands for treating obesity, pain and
PT   cognitive disorders.
XX
PS   Disclosure; Fig 6; 48pp; English.
XX
CC   The invention relates to mouse galanin receptor 2 (GALR2) and the nucleic
CC   acid encoding the novel polypeptide. The sequences are useful in assays
CC   for identifying GALR2 ligands that are useful for treating obesity, pain
CC   and cognitive disorders.The sequences are also useful for identifying
CC   agonists, antagonists, suppressors or inducers of GALR2. This sequence
CC   represents a cDNA probe used to isolate rat GALR2, used in the methods of
CC   the invention
XX
SQ   Sequence 283 BP; 27 A; 116 C; 84 G; 56 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 21.4;  DB 1;  Length 283;
  Best Local Similarity   61.8%;  Pred. No. 62;
  Matches   34;  Conservative    0;  Mismatches   21;  Indels    0;  Gaps    0;

Qy        600 TGGGGCTGCTGCCTTTCTCCCTGTCTGATTCCTAGGGTGAGGGTTACCACTGCTC 654
              | |||| |||||  | |  ||||||    | |  ||| ||||| | |  || | |
Db        112 TCGGGCCGCTGCTCTGCCGCCTGTCCCTCTACGTGGGCGAGGGCTGCACCTACGC 166


RESULT 143
AAS21354/c
ID   AAS21354 standard; cDNA; 1129 BP.
XX
AC   AAS21354;
XX
DT   24-OCT-2001  (first entry)
XX
DE   Human cDNA sequence encoding for PRO4327 polypeptide.
XX
KW   Human secretory and transmembrane; PRO; mammalian; cancer; lung; breast;
KW   prostate; cervical; tumour necrosis factor-alpha; TNF-alpha; cartilage;
KW   ear; proliferation; glucose; free fatty acid; skeletal muscle; adipocyte;
KW   A-peptide; factor VIIA; gene therapy; ss.
XX
OS   Homo sapiens.
```

XX
PN WO200140466-A2.
XX
PD 07-JUN-2001.
XX
PF 01-DEC-2000; 2000WO-US032678.
XX
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 09-DEC-1999; 99US-0170262P.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005841.
PR 03-MAR-2000; 2000US-0187202P.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 05-JUN-2000; 2000US-0209832P.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2001-408281/43.
DR P-PSDB; AAU12282.
XX
PT Isolated , secretory and transmembrane PRO polypeptide used to detect
PT other PRO polypeptides, link bioactive molecules to cells expressing PRO
PT polypeptides, and detect the presence of mammalian tumors e.g. lung,
PT breast, prostate, cervical.
XX
PS Claim 3; Fig 221; 813pp; English.
XX
CC AAS21244-AAS21518 encode for novel human secretory and transmembrane PRO
CC polypeptides. The PRO polypeptides are useful to detect other PRO
CC polypeptides, to link bioactive molecules to cells expressing PRO
CC polypeptides, to modulate biological activities of cells expressing PRO
CC polypeptides, and to detect the presence of mammalian lung, colon,
CC breast, prostate, rectal, cervical or liver tumours by comparing PRO
CC polypeptide expression in a cell sample to that in a control sample. Some
CC of the 275 sequences are also useful to stimulate the release of tumour
CC necrosis factor-alpha (TNF-alpha) from human blood, the proliferation or
CC differentiation of chondrocytes, the proliferation or gene expression in
CC pericyte cells, the release of proteoglycans from cartilage, the
CC proliferation of inner ear utricular supporting cells or of T-
CC lymphocytes, the release of a cytokine from peripheral blood monocytes
CC (PBMCs), or the proliferation of endothelial cells. Some of the PRO
CC polypeptides may modulate glucose or free fatty acid uptake by skeletal
CC muscle cells or by adipocytes; or inhibit binding of A-peptide to factor
CC VIIA. The PRO polypeptides can be used in assays to identify molecules
CC involved in binding interactions. The polynucleotides encoding PRO
CC polypeptides can be used to generate probes, antisense RNA/DNA,
CC transgenic or knock out animals and can be used in gene therapy
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 144
ACD23963/c
ID ACD23963 standard; cDNA; 1129 BP.
XX
AC ACD23963;
XX
DT 26-AUG-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; antiinflammatory;
KW antiarteriosclerotic; cardiant; anti-infertility; anti-HIV; cytostatic;
KW antidiabetic; gene therapy; tumour necrosis factor (TNF)-alpha release;
KW TNF-alpha release; cell proliferation; cell differentiation;
KW gene expression modulator; proteoglycan release; cytokine release;
KW tumour; inflammatory disease; organ failure; atherosclerosis;
KW cardiac injury; infertility; birth defect; premature aging; AIDS;
KW acquired immunodeficiency syndrome; cancer; diabetic complication;
KW chromosome mapping; gene mapping; pharmaceutical; diagnostic; biosensor;
KW bioreactor; tissue typing; gene; ss.
XX
OS Homo sapiens.
XX
PN US2003032156-A1.
XX
PD 13-FEB-2003.
XX
PF 06-MAY-2002; 2002US-00140474.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.

PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-341980/32.
DR P-PSDB; AB017726.
XX
PT New secreted and transmembrane PRO nucleic acids, for treating
PT inflammation, organ failure, atherosclerosis, cardiac injury,
PT infertility, birth defects, premature aging, axquired immunodeficiency
PT syndrome (AIDS), or cancer.
XX
PS Claim 2; Fig 221; 660pp; English.
XX
CC The invention describes an isolated nucleic acid (I) comprising, or which
CC has 80 % sequence identity to, or the full-length coding sequence of, one
CC of 275 nucleotide sequences, and which encodes a corresponding
CC polypeptide selected from 275 amino acid sequences, where all sequences
CC are given in the specification. The polypeptide encoded by (I) is used to
CC detect PRO polypeptides, link a bioactive molecule to a cell expressing a
CC PRO polypeptide, modulate a biological activity of a cell, stimulate the
CC release of tumour necrosis factor (TNF)-alpha from human blood, modulate
CC the uptake of glucose or free fatty acid by cells, stimulate or inhibit
CC the proliferation or differentiation of cells or gene expression,
CC stimulate the release of proteoglycans, stimulate the release of cytokine
CC from peripheral blood mononuclear cells, inhibit the binding of A-peptide
CC to factor VIIA, or detect the presence of tumour in a mammal. The nucleic
CC acid and polypeptide encoded by it, are useful for treating inflammatory
CC diseases, organ failure, atherosclerosis, cardiac injury, infertility,
CC birth defects, premature aging, acquired immunodeficiency syndrome
CC (AIDS), cancer, or diabetic complications. The nucleic acid is useful as
CC hybridisation probes, in chromosome and gene mapping, and in generating
CC antisense RNA or DNA. The polypeptides are useful as pharmaceuticals,
CC diagnostics, biosensors or bioreactors. Both are useful in tissue typing.
CC This sequence encodes a novel human secreted and transmembrane PRO
CC polypeptide
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 145
ACA67104/c
ID ACA67104 standard; cDNA; 1129 BP.
XX
AC ACA67104;
XX
DT 23-JUN-2003 (first entry)
XX
DE cDNA encoding human PRO polypeptide #111.
XX
KW Human; PRO polypeptide; secreted and transmembrane protein;
KW anti-PRO antibody; diagnostic assay; gene expression; diabetes;
KW bone disorder; cartilage disorder; rheumatoid arthritis; obesity;
KW sports injury; osteoarthritis; hyper-insulinaemia; hypo-insulinaemia;
KW hearing loss; coagulation disorder; stroke; heart attack; cardiant;
KW antidiabetic; anorectic; vulnerary; antiarthritic; osteopathic;
KW antirheumatic; auditory; cerebroprotective; angiogenic; gene; ss.
XX

OS Homo sapiens.
XX
PN US2003004311-A1.
XX
PD 02-JAN-2003.
XX
PF 19-DEC-2001; 2001US-00028072.
XX
PR 18-JUN-1997; 97US-0049911P.
PR 26-AUG-1997; 97US-0056974P.
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 19-SEP-1997; 97US-0059352P.
PR 19-SEP-1997; 97US-0059588P.
PR 24-SEP-1997; 97US-0059836P.
PR 17-OCT-1997; 97US-0062250P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 17-OCT-1997; 97US-0063755P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063082P.
PR 24-OCT-1997; 97US-0063127P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063561P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063733P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 11-DEC-1997; 97US-0069212P.
PR 11-DEC-1997; 97US-0069278P.
PR 11-DEC-1997; 97US-0069334P.
PR 16-DEC-1997; 97US-0069694P.
PR 23-JAN-1998; 98US-0072320P.
PR 04-FEB-1998; 98US-0073612P.
PR 09-FEB-1998; 98US-0074086P.
PR 09-FEB-1998; 98US-0074092P.
PR 12-MAR-1998; 98US-0077791P.
PR 20-MAR-1998; 98US-0078910P.
PR 25-MAR-1998; 98US-0079294P.
PR 27-MAR-1998; 98US-0079663P.
PR 27-MAR-1998; 98US-0079728P.
PR 31-MAR-1998; 98US-0080165P.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-352836/33.
DR P-PSDB; ABU80980.
XX
PT New isolated PRO polypeptide useful for treating diabetes, rheumatoid
PT arthritis, sports injuries, obesity, hearing loss in mammals, stroke, or
PT heart attack.
XX
PS Claim 2; Fig 221; 643pp; English.
XX
CC The present invention relates to the isolation of novel human PRO
CC polypeptides, and the polynucleotide sequences encoding them. The PRO
CC polypeptides are secreted and transmembrane proteins. The PRO
CC polypeptides and polynucleotides are useful for preparing a medicament
CC useful in the treatment of diabetes, bone and/or cartilage disorders
CC (e.g. rheumatoid arthritis, sports injuries, osteoarthritis), obesity,
CC hyper- or hypo-insulinaemia, hearing loss, and coagulation disorders
CC (e.g. stroke, heart attack). Anti-PRO antibodies are useful in diagnostic
CC assays for PRO, by detecting its expression in specific cells, tissues or
CC serum, and for affinity purification of PRO from recombinant cell culture
CC or natural sources. ACA66994-ACA67268 represent cDNA sequences encoding
CC the human PRO polypeptides of the invention. Note: The sequence data for
CC this patent was obtained in electronic format directly from the USPTO web
CC site at seqdata.uspto.gov/psipsDIDEntry.html
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423

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Db       1129 TTTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083


RESULT 146
ACA03713/c
ID   ACA03713 standard; cDNA; 1129 BP.
XX
AC   ACA03713;
XX
DT   23-MAY-2003  (first entry)
XX
DE   cDNA encoding human PRO polypeptide #111.
XX
KW   Human; PRO polypeptide; secreted and transmembrane protein;
KW   tumour necrosis factor-alpha; TNF-alpha; blood; proliferation;
KW   differentiation; chondrocyte; tumour; genetic disorder; cytostatic; gene;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   US2003036180-A1.
XX
PD   20-FEB-2003.
XX
PF   09-MAY-2002; 2002US-00143114.
XX
PR   31-MAR-1997;   97WO-US005230.
PR   12-JUN-1998;   98WO-US012456.
PR   14-JUL-1998;   98WO-US014552.
PR   28-AUG-1998;   98WO-US017888.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98WO-US019093.
PR   14-SEP-1998;   98WO-US019094.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98WO-US019437.
PR   07-OCT-1998;   98WO-US021141.
PR   29-OCT-1998;   98WO-US022991.
PR   29-OCT-1998;   98WO-US022992.
PR   20-NOV-1998;   98WO-US024855.
PR   01-DEC-1998;   98WO-US025108.
PR   05-JAN-1999;   99WO-US000106.
PR   08-MAR-1999;   99WO-US005028.
PR   10-MAR-1999;   99WO-US005190.
PR   20-APR-1999;   99WO-US008615.
PR   14-MAY-1999;   99WO-US010733.
PR   02-JUN-1999;   99WO-US012252.
PR   01-SEP-1999;   99WO-US020111.
PR   08-SEP-1999;   99WO-US020594.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   30-NOV-1999;   99WO-US028409.
PR   01-DEC-1999;   99WO-US028301.
PR   01-DEC-1999;   99WO-US028634.
PR   02-DEC-1999;   99WO-US028551.
PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   20-DEC-1999;   99WO-US030999.
PR   22-DEC-1999;   99WO-US030720.
PR   30-DEC-1999;   99WO-US031243.
PR   30-DEC-1999;   99WO-US031274.
PR   05-JAN-2000; 2000WO-US000219.
PR   06-JAN-2000; 2000WO-US000277.
PR   06-JAN-2000; 2000WO-US000376.
PR   11-FEB-2000; 2000WO-US003565.
PR   18-FEB-2000; 2000WO-US004341.
PR   18-FEB-2000; 2000WO-US004342.
PR   22-FEB-2000; 2000WO-US004414.
PR   24-FEB-2000; 2000WO-US004914.
PR   24-FEB-2000; 2000WO-US005004.
PR   01-MAR-2000; 2000WO-US005601.
PR   02-MAR-2000; 2000WO-US005746.
PR   02-MAR-2000; 2000WO-US005841.
PR   10-MAR-2000; 2000WO-US006319.
PR   15-MAR-2000; 2000WO-US006884.
PR   20-MAR-2000; 2000WO-US007377.
PR   21-MAR-2000; 2000WO-US007532.
PR   30-MAR-2000; 2000WO-US008439.
PR   17-MAY-2000; 2000WO-US013705.
PR   22-MAY-2000; 2000WO-US014042.
PR   30-MAY-2000; 2000WO-US014941.
PR   02-JUN-2000; 2000WO-US015264.
PR   28-JUL-2000; 2000WO-US020710.
PR   11-AUG-2000; 2000WO-US022031.
PR   23-AUG-2000; 2000WO-US023522.
PR   24-AUG-2000; 2000WO-US023328.
PR   08-NOV-2000; 2000WO-US030952.
PR   10-NOV-2000; 2000WO-US030873.
PR   01-DEC-2000; 2000WO-US032678.
PR   20-DEC-2000; 2000US-00747259.
PR   20-DEC-2000; 2000WO-US034956.
PR   28-FEB-2001; 2001US-00796498.
PR   28-FEB-2001; 2001WO-US006520.
PR   01-MAR-2001; 2001WO-US006666.
PR   09-MAR-2001; 2001US-00802706.
PR   14-MAR-2001; 2001US-00808689.
PR   22-MAR-2001; 2001US-00816744.
PR   05-APR-2001; 2001US-00828366.
PR   10-MAY-2001; 2001US-00854208.
PR   10-MAY-2001; 2001US-00854280.
PR   18-MAY-2001; 2001US-00860216.
PR   25-MAY-2001; 2001US-00866028.
PR   25-MAY-2001; 2001US-00866034.
PR   25-MAY-2001; 2001WO-US017092.
PR   01-JUN-2001; 2001US-00872035.
PR   01-JUN-2001; 2001WO-US017800.
PR   05-JUN-2001; 2001US-00874503.
PR   14-JUN-2001; 2001US-00882636.
PR   19-JUN-2001; 2001US-00886342.
PR   20-JUN-2001; 2001WO-US019692.
PR   21-JUN-2001; 2001US-00887879.
PR   22-JUN-2001; 2001WO-US020116.
PR   29-JUN-2001; 2001WO-US021066.
PR   09-JUL-2001; 2001WO-US021735.
PR   18-JUL-2001; 2001US-00908827.
PR   06-AUG-2001; 2001US-00924419.
PR   09-AUG-2001; 2001US-00927796.
PR   16-AUG-2001; 2001US-00931836.
PR   19-DEC-2001; 2001US-00028072.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Baker KP,  Beresini M,  Deforge L,  Desnoyers L,  Filvaroff E,  Gao W;
PI   Gerritsen ME,  Goddard A,  Godowski PJ,  Gurney AL,  Sherwood S;
PI   Smith V,  Stewart TA,  Tumas D,  Watanabe CK,  Wood WI,  Zhang Z;
XX
DR   WPI; 2003-332040/31.
DR   P-PSDB; ABU66680.
XX
PT   New secreted and transmembrane PRO nucleic acids, useful for gene
PT   therapy, in chromosome and gene mapping, as chromosome markers, in tissue
PT   typing, and in chromosome identification.
XX
PS   Claim 2; Fig 221; 660pp; English.
XX
CC   The present invention relates to the isolation of novel human PRO
CC   polypeptides, and the polynucleotide sequences encoding them. The PRO
CC   polypeptides are secreted and transmembrane proteins. The PRO
CC   polypeptides are useful for detecting other PRO polypeptides, for linking
```

CC bioactive molecules to cells expressing PRO polypeptides, for modulating
CC biological activities of cells expressing PRO polypeptides, and for for
CC identifying agonists or antagonists. The PRO polypeptides are useful for
CC for stimulating the release of tumour necrosis factor (TNF)-alpha from
CC human blood, for stimulating the proliferation or differentiation of
CC chondrocytes, and detecting the presence of tumours. The polynucleotide
CC sequences encoding PRO polypeptides are useful as hybridisation probes,
CC in chromosome and gene mapping, in the generation of antisense RNA and
CC DNA, in the preparation of PRO polypeptides, for generating transgenic
CC animals or knockout animals, for the genetic analysis of individuals with
CC genetic disorders, and in gene therapy. ACA03603-ACA03877 represent cDNAs
CC encoding the human PRO polypeptides of the invention. Note: The sequence
CC data for this patent was obtained in electronic format directly from the
CC USPTO web site at seqdata.uspto.gov/psipsDIDEntry.html
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 147
ABX89251/c
ID ABX89251 standard; cDNA; 1129 BP.
XX
AC ABX89251;
XX
DT 13-MAY-2003 (first entry)
XX
DE DNA encoding novel secreted and transmembrane protein PRO4327.
XX
KW Human; PRO; hypertrophy of neonatal heart; angiogenesis; wound healing;
KW cardiac insufficiency disorder; cancer; tumour; immune response;
KW adrenal cortical capillary endothelial growth; c-fos induction;
KW vascular endothelial growth factor inhibition; VEGF inhibition;
KW endothelial cell growth inhibitor; T-lymphocytes stimulation;
KW retinal neurons cell survival; rod photoreceptor cell survival;
KW retinal disorder; retinitis pigmentosum; kidney disorder;
KW mammalian kidney mesangial cell proliferation; Berger disease;
KW dermatitis; herpetiformis; Crohn's disease; chondrocyte proliferation;
KW chondrocyte redifferentiation; sports injury; arthritis; gene; ss.
XX
OS Homo sapiens.
XX
PN US2003017563-A1.
XX
PD 23-JAN-2003.
XX
PF 07-MAY-2002; 2002US-00140808.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.

PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-148238/14.
DR P-PSDB; ABU59761.
XX
PT Two hundred and seventy five nucleic acids encoding PRO polypeptides,
PT useful for treating pericyte-associated tumors, diabetes and various bone
PT and/or cartilage disorders, e.g. arthritis.
XX
PS Claim 2; Fig 221; 659pp; English.
XX
CC The invention describes an isolated human PRO polypeptide. The PRO
CC polypeptides are useful in detecting PRO polypeptides in a sample, in
CC linking a bioactive molecule to a cell expressing a PRO polypeptide, and
CC in modulating at least one biological activity of a cell expressing a PRO
CC polypeptide. PRO1312 stimulates hypertrophy of neonatal heart and is thus
CC useful for treating cardiac insufficiency disorders. PRO1154 and PRO1186
CC stimulate adrenal cortical capillary endothelial growth, and PRO536,
CC PRO943, PRO828, PRO826, PRO1068 or PRO535, PRO826, PRO819, PRO1126,
CC PRO1360 and PRO1387 induce c-fos in endothelial cells, and are thus
CC useful for treating conditions or disorders where angiogenesis would be
CC beneficial, e.g. wound healing and antagonist of this polypeptide are
CC useful for treating cancerous tumours. PRO812 inhibits vascular
CC endothelial growth factor (VEGF) stimulated proliferation of endothelial
CC cells and is thus useful for inhibiting endothelial cell growth in
CC mammals which would be beneficial in inhibiting tumour growth. PRO826,
CC PRO1068, PRO1184, PRO1346 and PRO1375 stimulate proliferation of
CC stimulated T-lymphocytes and are therapeutically useful for enhancing
CC immune response. PRO828, PRO826, PRO1068 or PRO1132 enhance survival of
CC retinal neurons cells (PRO1132 is also enhances survival/proliferation of
CC rod photoreceptor cells) and therefore are useful for treating retinal
CC disorders of injuries, e.g. retinitis pigmentosum, AMD. PRO819, PRO813
CC and PRO11066 induce proliferation of mammalian kidney mesangial cells,
CC and therefore are useful for treating kidney disorders associated with
CC decreased mesangial cell function such as Berger disease or other
CC nephropathies associated with dermatitis, herpetiformis or Crohn's
CC disease. PRO1310, PRO844, PRO1312, PRO1192 and PRO1387 induce the
CC proliferation and/or redifferentiation of chondrocytes in culture and are
CC thus useful for treating sports injuries, and arthritis. This sequence
CC encodes a novel human PRO protein
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 148
ACD41905/c
ID ACD41905 standard; cDNA; 1129 BP.
XX
AC ACD41905;
XX
DT 05-SEP-2003 (first entry)
XX
DE Human secreted/transmembrane protein (PRO) cDNA #111.
XX
KW Human; ss; gene; PRO; secreted protein; transmembrane protein; tumour;
KW cytostatic; gene therapy; tumour necrosis factor-alpha; TNF-alpha; blood;
KW proteoglycan; cartilage; cytokine; peripheral blood mononuclear cell;
KW PBMC; glucose uptake; FFA; skeletal muscle cell; adipocyte cell;
KW chondrocyte cell proliferation; chondrocyte cell differentiation;
KW pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell; A-peptide; factor VIIA.
XX
OS Homo sapiens.
XX
PN US2003036179-A1.
XX
PD 20-FEB-2003.
XX
PF 10-MAY-2002; 2002US-00142431.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.

PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-466355/44.
DR P-PSDB; ABO24951.
XX
PT New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 or
PT PRO4978, useful in molecular biology, chromosome and gene mapping, in
PT generating antisense RNA and DNA, and in gene therapy.
XX
PS Claim 2; Fig 221; 659pp; English.
XX
CC The invention relates to an isolated nucleic acid comprising at least 80%
CC sequence identity to a PRO (secreted and transmembrane protein) cDNA
CC comprising a nucleic acid (a) encoding a PRO polypeptide, or its
CC extracellular domain (with or without its associated signal peptide),
CC which comprises any of the 275 120-850 residue amino acid sequences,
CC given in the specification; (b) comprising any of the 275 300-3500
CC nucleotide sequences, given in the specification; or (c) comprising the
CC full-length coding sequence of the nucleotide sequences given in the
CC specification, or of the DNA deposited under any of the American Type
CC Culture Collection (ATCC) Accession Numbers listed in the specification.
CC Also included are a vector comprising the novel nucleic acid, a host cell
CC comprising the vector, producing a PRO polypeptide, the isolated PRO
CC polypeptides detailed above, a chimaeric molecule comprising the PRO
CC polypeptide of fused to a heterologous amino acid sequence, an anti-PRO
CC antibody, detecting a PRO polypeptide in a sample suspected of containing
CC the PRO polypeptide, linking a bioactive molecule to a cell expressing a
CC PRO polypeptide, modulating at least one biological activity of a cell
CC expressing a PRO polypeptide, stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, (or proteoglycans from
CC cartilage or cytokine from peripheral blood mononuclear cells (PBMC)),
CC modulating the uptake of glucose or FFA by skeletal muscle cells or
CC adipocyte cells, stimulating the proliferation or differentiation of
CC chondrocyte cells (or proliferation of or gene expression in pericyte
CC cells), stimulating the proliferation of inner ear utricular supporting
CC cells (or of T-lymphocyte cells, or of endothelial cells), inhibiting the
CC binding of A-peptide to factor VIIA, or differentiation of adipocyte
CC cells, detecting the presence of a tumour in a mammal and an
CC oligonucleotide probe derived from any of the nucleotide sequences given
CC in the specification. The polynucleotide is useful in molecular biology,
CC including uses as hybridisation probes, in chromosome and gene mapping,
CC in generating antisense RNA and DNA, and in gene therapy. The
CC polynucleotide may also be used in preparing PRO polypeptides by
CC recombinant techniques, and in generating either transgenic animals or
CC knock-out animals which, in turn, are useful in the development and
CC screening of therapeutically useful reagents. The PRO polypeptide or the
CC antibody is used in preparing a medicament for treating a condition
CC responsive to the polypeptide or antibody, such as tumours, and in
CC various diagnostic assays. The present sequence encodes a PRO polypeptide
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 149
ACA04134/c
ID ACA04134 standard; cDNA; 1129 BP.
XX
AC ACA04134;
XX
DT 27-MAY-2003 (first entry)
XX
DE Human cDNA encoding a secreted/transmembrane protein, SEQ ID 221.
XX
KW Human; ss; gene; secreted protein; transmembrane protein; PRO;
KW inflammatory disease; organ failure; atherosclerosis; cardiac injury;
KW infertility; birth defects; premature aging; AIDS; biosensor;
KW acquired immunodeficiency syndrome; cancer; diabetic complication;
KW bioreactor; tumour.
XX
OS Homo sapiens.
XX
PN US2003032155-A1.
XX
PD 13-FEB-2003.
XX
PF 03-MAY-2002; 2002US-00137865.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.

PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-331925/31.
DR P-PSDB; ABU66956.
XX
PT New secreted and transmembrane nucleic acids and polypeptides, designated
PT as PRO, useful for treating inflammation, organ failure, atherosclerosis,
PT cardiac injury, infertility, birth defects, premature aging, AIDS, or
PT cancer.
XX
PS Claim 2; Fig 221; 659pp; English.
XX
CC The invention relates to an isolated nucleic acid comprising, or which is
CC at least 80% identical to, or the full-length coding sequence of, any of
CC the 275 nucleotide sequences, encoding the corresponding PRO polypeptide
CC (one of 275 secreted or transmembrane proteins). The nucleic acid further
CC comprises the full-length coding sequence of the DNA deposited under
CC American Type Culture Collection (ATCC) accession number in a list given
CC in the specification. Also included are vectors and host cells for
CC producing PRO proteins, PRO fusion proteins, anti-PRO antibodies, PRO
CC extracellular domains and mature sequences, methods of detecting PRO
CC proteins, methods for stimulating the release of TNF-alpha (tumour
CC necrosis factor alpha) from human blood, (and the proliferation of
CC differentiation of chondrocyte cells, the proliferation of, or gene
CC expression in pericyte cells, the release or proteoglycans from
CC cartilage, proliferation of inner ear urticular supporting cells, the
CC proliferation of T-lymphocyte cells, the release of a cytokine from
CC peripheral blood mononuclear cells (PBMC), or the proliferation of
CC endothelial cells), a method for modulating the uptake of glucose or free
CC fatty acid (FFA) by skeletal muscle cells, a method for inhibiting the
CC binding of A-peptide to factor VIIA, or the differentiation of adipocyte
CC cells, a method for detecting the presence of a tumour in a mammal and an
CC oligonucleotide probe derived from any of the nucleotide sequences cited
CC above. The nucleic acids and polypeptides are useful for treating
CC inflammatory diseases, organ failure, atherosclerosis, cardiac injury,
CC infertility, birth defects, premature aging, AIDS (acquired
CC immunodeficiency syndrome), cancer, or diabetic complications. The
CC nucleic acids are useful as hybridisation probes, in chromosome and gene
CC mapping, and in generating antisense RNA or DNA. The polypeptides are
CC useful as pharmaceuticals, diagnostics, biosensors or bioreactors. Both
CC are useful in tissue typing. The present sequence encodes a PRO protein
CC of the invention
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

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RESULT 150
ADA45740/c
ID   ADA45740 standard; cDNA; 1129 BP.
XX
AC   ADA45740;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW   Human; secreted and transmembrane protein; PRO; gene; ss;
KW   Tumour necrosis factor alpha release; TNF-alpha release;
KW   glucose uptake modulator; FFA uptake modulator;
KW   cell proliferation stimulator; cell differentiation stimulator;
KW   cell differentiation inihibitor; cytokine release stimulator; tumour;
KW   lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW   cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW   gene therapy; chromosome identification; chromosome marker.
XX
OS   Homo sapiens.
XX
PN   US2003022328-A1.
XX
PD   30-JAN-2003.
XX
PF   16-APR-2002; 2002US-00123904.
XX
PR   31-MAR-1997;   97WO-US005230.
PR   12-JUN-1998;   98WO-US012456.
PR   14-JUL-1998;   98WO-US014552.
PR   28-AUG-1998;   98WO-US017888.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98WO-US019093.
PR   14-SEP-1998;   98WO-US019094.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98WO-US019437.
PR   07-OCT-1998;   98WO-US021141.
PR   29-OCT-1998;   98WO-US022991.
PR   29-OCT-1998;   98WO-US022992.
PR   20-NOV-1998;   98WO-US024855.
PR   01-DEC-1998;   98WO-US025108.
PR   05-JAN-1999;   99WO-US000106.
PR   08-MAR-1999;   99WO-US005028.
PR   10-MAR-1999;   99WO-US005190.
PR   20-APR-1999;   99WO-US008615.
PR   14-MAY-1999;   99WO-US010733.
PR   02-JUN-1999;   99WO-US012252.
PR   01-SEP-1999;   99WO-US020111.
PR   08-SEP-1999;   99WO-US020594.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   30-NOV-1999;   99WO-US028409.
PR   01-DEC-1999;   99WO-US028301.
PR   01-DEC-1999;   99WO-US028634.
PR   02-DEC-1999;   99WO-US028551.
PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   20-DEC-1999;   99WO-US030999.
PR   22-DEC-1999;   99WO-US030720.
PR   30-DEC-1999;   99WO-US031243.
PR   30-DEC-1999;   99WO-US031274.
PR   05-JAN-2000; 2000WO-US000219.
PR   06-JAN-2000; 2000WO-US000277.
PR   06-JAN-2000; 2000WO-US000376.
PR   11-FEB-2000; 2000WO-US003565.
PR   18-FEB-2000; 2000WO-US004341.
PR   18-FEB-2000; 2000WO-US004342.
PR   22-FEB-2000; 2000WO-US004414.
PR   24-FEB-2000; 2000WO-US004914.
PR   24-FEB-2000; 2000WO-US005004.
PR   01-MAR-2000; 2000WO-US005601.
PR   02-MAR-2000; 2000WO-US005746.
PR   02-MAR-2000; 2000WO-US005841.
PR   10-MAR-2000; 2000WO-US006319.
PR   15-MAR-2000; 2000WO-US006884.
PR   20-MAR-2000; 2000WO-US007377.
PR   21-MAR-2000; 2000WO-US007532.
PR   30-MAR-2000; 2000WO-US008439.
PR   17-MAY-2000; 2000WO-US013705.
PR   22-MAY-2000; 2000WO-US014042.
PR   30-MAY-2000; 2000WO-US014941.
PR   02-JUN-2000; 2000WO-US015264.
PR   28-JUL-2000; 2000WO-US020710.
PR   11-AUG-2000; 2000WO-US022031.
PR   23-AUG-2000; 2000WO-US023522.
PR   24-AUG-2000; 2000WO-US023328.
PR   08-NOV-2000; 2000WO-US030952.
PR   10-NOV-2000; 2000WO-US030873.
PR   01-DEC-2000; 2000WO-US032678.
PR   20-DEC-2000; 2000US-00747259.
PR   20-DEC-2000; 2000WO-US034956.
PR   28-FEB-2001; 2001US-00796498.
PR   28-FEB-2001; 2001WO-US006520.
PR   01-MAR-2001; 2001WO-US006666.
PR   09-MAR-2001; 2001US-00802706.
PR   14-MAR-2001; 2001US-00808689.
PR   22-MAR-2001; 2001US-00816744.
PR   05-APR-2001; 2001US-00828366.
PR   10-MAY-2001; 2001US-00854208.
PR   10-MAY-2001; 2001US-00854280.
PR   18-MAY-2001; 2001US-00860216.
PR   25-MAY-2001; 2001US-00866028.
PR   25-MAY-2001; 2001US-00866034.
PR   25-MAY-2001; 2001WO-US017092.
PR   01-JUN-2001; 2001US-00872035.
PR   01-JUN-2001; 2001WO-US017800.
PR   05-JUN-2001; 2001US-00874503.
PR   14-JUN-2001; 2001US-00882636.
PR   19-JUN-2001; 2001US-00886342.
PR   20-JUN-2001; 2001WO-US019692.
PR   21-JUN-2001; 2001US-00887879.
PR   22-JUN-2001; 2001WO-US020116.
PR   29-JUN-2001; 2001WO-US021066.
PR   09-JUL-2001; 2001WO-US021735.
PR   18-JUL-2001; 2001US-00908827.
PR   06-AUG-2001; 2001US-00924419.
PR   09-AUG-2001; 2001US-00927796.
PR   16-AUG-2001; 2001US-00931836.
PR   19-DEC-2001; 2001US-00028072.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Baker KP,  Beresini M,  Deforge L,  Desnoyers L,  Filvaroff E,  Gao W;
PI   Gerritsen ME,  Goddard A,  Godowski PJ,  Gurney AL,  Sherwood S;
PI   Smith V,  Stewart TA,  Tumas D,  Watanabe CK,  Wood WI,  Zhang Z;
XX
DR   WPI; 2003-584997/55.
DR   P-PSDB; ADA45741.
XX
PT   Novel secreted and transmembrane polypeptide for modulating biological
PT   activity of cell expressing the polypeptide, identifying agonists or
PT   antagonists of polypeptide, and as molecular weight markers.
XX
PS   Claim 2; Fig 221; 659pp; English.
XX
CC   The invention describes 305 nucleic acids encoding PRO (secreted and
CC   transmembrane) polypeptides (I). (I) is useful for stimulating the
CC   release of TNF-alpha from human blood, for modulating the uptake of
CC   glucose or FFA by skeletal muscle cells or adipocyte cells, for
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CC   stimulating the proliferation or differentiation of chondrocyte cells,
CC   for stimulating the proliferation of or gene expression in pericyte
CC   cells, for stimulating the release of proteoglycans from cartilage, for
CC   stimulating the proliferation of inner ear utricular supporting cells,
CC   for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC   the release of a cytokine from PBMC cells, for inhibiting the binding of
CC   A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC   cells, for stimulating proliferation of endothelial cells, for detecting
CC   the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC   prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC   are useful for isolating genomic and cDNA nucleotide sequences or
CC   antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC   in assays to identify other proteins or molecules involved in binding
CC   interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC   and gene mapping, in generation of antisense RNA and DNA, in the
CC   preparation of PRO polypeptide, for generating transgenic animals or
CC   knockout animals which in turn are useful in the development and
CC   screening of therapeutically useful reagents, in gene therapy, for
CC   chromosome identification, as chromosome marker, and for generating
CC   probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC   detecting its expression in specific cells, tissues or serum, and for
CC   affinity purification of PRO from recombinant cell culture or natural
CC   sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC   a novel human secreted and transmembrane PRO polypeptide.
XX
SQ   Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 21.4;  DB 1;  Length 1129;
  Best Local Similarity   66.0%;  Pred. No. 95;
  Matches   31;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy       2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
              || ||  ||||||  ||| ||| |  |   |||  ||||||||  ||
Db       1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083


RESULT 151
ADA76171/c
ID   ADA76171 standard; cDNA; 1129 BP.
XX
AC   ADA76171;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Human PRO polynucleotide #111.
XX
KW   Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW   tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW   cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW   liver; microvascular endothelial cell; glucose; FFA;
KW   skeletal muscle cell; adipocyte cell; pericyte cell;
KW   inner ear utricular supporting cell; T-lymphocyte cell;
KW   endothelial cell tube formation; bone disorder; cartilage disorder;
KW   sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW   rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW   immune system cell infiltration.
XX
OS   Homo sapiens.
XX
PN   US2003073212-A1.
XX
PD   17-APR-2003.
XX
PF   16-APR-2002; 2002US-00123903.
XX
PR   31-MAR-1997;   97WO-US005230.
PR   12-JUN-1998;   98WO-US012456.
PR   14-JUL-1998;   98WO-US014552.
PR   28-AUG-1998;   98WO-US017888.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98WO-US019093.
PR   14-SEP-1998;   98WO-US019094.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98WO-US019437.
PR   07-OCT-1998;   98WO-US021141.
PR   29-OCT-1998;   98WO-US022991.
PR   29-OCT-1998;   98WO-US022992.
PR   20-NOV-1998;   98WO-US024855.
PR   01-DEC-1998;   98WO-US025108.
PR   05-JAN-1999;   99WO-US000106.
PR   08-MAR-1999;   99WO-US005028.
PR   10-MAR-1999;   99WO-US005190.
PR   20-APR-1999;   99WO-US008615.
PR   14-MAY-1999;   99WO-US010733.
PR   02-JUN-1999;   99WO-US012252.
PR   01-SEP-1999;   99WO-US020111.
PR   08-SEP-1999;   99WO-US020594.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   30-NOV-1999;   99WO-US028409.
PR   01-DEC-1999;   99WO-US028301.
PR   01-DEC-1999;   99WO-US028634.
PR   02-DEC-1999;   99WO-US028551.
PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   20-DEC-1999;   99WO-US030999.
PR   22-DEC-1999;   99WO-US030720.
PR   30-DEC-1999;   99WO-US031243.
PR   30-DEC-1999;   99WO-US031274.
PR   05-JAN-2000;  2000WO-US000219.
PR   06-JAN-2000;  2000WO-US000277.
PR   06-JAN-2000;  2000WO-US000376.
PR   11-FEB-2000;  2000WO-US003565.
PR   18-FEB-2000;  2000WO-US004341.
PR   18-FEB-2000;  2000WO-US004342.
PR   22-FEB-2000;  2000WO-US004414.
PR   24-FEB-2000;  2000WO-US004914.
PR   24-FEB-2000;  2000WO-US005004.
PR   01-MAR-2000;  2000WO-US005601.
PR   02-MAR-2000;  2000WO-US005746.
PR   02-MAR-2000;  2000WO-US005841.
PR   10-MAR-2000;  2000WO-US006319.
PR   15-MAR-2000;  2000WO-US006884.
PR   20-MAR-2000;  2000WO-US007377.
PR   21-MAR-2000;  2000WO-US007532.
PR   30-MAR-2000;  2000WO-US008439.
PR   17-MAY-2000;  2000WO-US013705.
PR   22-MAY-2000;  2000WO-US014042.
PR   30-MAY-2000;  2000WO-US014941.
PR   02-JUN-2000;  2000WO-US015264.
PR   28-JUL-2000;  2000WO-US020710.
PR   11-AUG-2000;  2000WO-US022031.
PR   23-AUG-2000;  2000WO-US023522.
PR   24-AUG-2000;  2000WO-US023328.
PR   08-NOV-2000;  2000WO-US030952.
PR   10-NOV-2000;  2000WO-US030873.
PR   01-DEC-2000;  2000WO-US032678.
PR   20-DEC-2000;  2000US-00747259.
PR   20-DEC-2000;  2000WO-US034956.
PR   28-FEB-2001;  2001US-00796498.
PR   28-FEB-2001;  2001WO-US006520.
PR   01-MAR-2001;  2001WO-US006666.
PR   09-MAR-2001;  2001US-00802706.
PR   14-MAR-2001;  2001US-00808689.
PR   22-MAR-2001;  2001US-00816744.
PR   05-APR-2001;  2001US-00828366.
PR   10-MAY-2001;  2001US-00854208.
PR   10-MAY-2001;  2001US-00854280.
PR   18-MAY-2001;  2001US-00860216.
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PR   25-MAY-2001; 2001US-00866028.
PR   25-MAY-2001; 2001US-00866034.
PR   25-MAY-2001; 2001WO-US017092.
PR   01-JUN-2001; 2001US-00872035.
PR   01-JUN-2001; 2001WO-US017800.
PR   05-JUN-2001; 2001US-00874503.
PR   14-JUN-2001; 2001US-00882636.
PR   19-JUN-2001; 2001US-00886342.
PR   20-JUN-2001; 2001WO-US019692.
PR   21-JUN-2001; 2001US-00887879.
PR   22-JUN-2001; 2001WO-US020116.
PR   29-JUN-2001; 2001WO-US021066.
PR   09-JUL-2001; 2001WO-US021735.
PR   18-JUL-2001; 2001US-00908827.
PR   06-AUG-2001; 2001US-00924419.
PR   09-AUG-2001; 2001US-00927796.
PR   16-AUG-2001; 2001US-00931836.
PR   19-DEC-2001; 2001US-00028072.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI   Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI   Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR   WPI; 2003-687639/65.
DR   P-PSDB; ADA76172.
XX
PT   New isolated nucleic acid encoding a secreted and transmembrane
PT   polypeptide, designated e.g. PRO1114 or PRO4978, useful in chromosome and
PT   gene mapping, in generating antisense RNA and DNA, and in gene therapy.
XX
PS   Claim 2; Fig 221; 659pp; English.
XX
CC   The invention relates to isolated human PRO polypeptides (secreted and
CC   transmembrane polypeptides) and the polynucleotides encoding them. The
CC   invention also relates to an antibody which specifically binds to a PRO
CC   polypeptide, a method for stimulating the release of tumour necrosis
CC   factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC   proliferation or differentiation of chondrocyte cells and a method for
CC   detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC   colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC   polynucleotides are useful in molecular biology, including uses as
CC   hybridisation probes, in chromosome and gene mapping, in generating
CC   antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC   be used in preparing PRO polypeptides by recombinant techniques and in
CC   generating either transgenic animals or knock-out animals which are
CC   useful in the development and screening of therapeutically useful
CC   reagents. The PRO polypeptides or antibodies are used in preparing a
CC   medicament for treating a condition responsive to the polypeptides or
CC   antibodies, such as tumours, for stimulating and inhibiting proliferation
CC   of human microvascular endothelial cells, for modulating the uptake of
CC   glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC   stimulating differentiation of adipocyte cells, for stimulating
CC   proliferation of or gene expression in pericyte cells, for stimulating
CC   the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC   cells, for inducing endothelial cell tube formation and for treating
CC   various bone and/or cartilage disorders such as sports injuries and
CC   arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC   from cartilage are useful for treating sports-related joint problems,
CC   articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC   polypeptides are also useful for treating various mammalian haemoglobin-
CC   associated disorders such as various thalassaemias and conditions which
CC   may benefit from enhanced local immune system cell infiltration. This
CC   sequence represents a human PRO polynucleotide of the invention. Note:
CC   The sequence data for this patent is also available in electronic format
CC   from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ   Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 21.4;  DB 1;  Length 1129;
  Best Local Similarity   66.0%;  Pred. No. 95;
  Matches   31;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy       2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
             || ||  |||||  ||| ||| |  |   |||  |||||||  ||
Db       1129 TTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083


RESULT 152
ADA18821/c
ID   ADA18821 standard; cDNA; 1129 BP.
XX
AC   ADA18821;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Human PRO polynucleotide #111.
XX
KW   Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW   tumour necrosis factor-alpha; TNF-alpha; blood; chondrocyte cell; lung;
KW   colon; breast; prostate; rectum; cervix; liver; tumour; cancer;
KW   glucose uptake; FFA; adipocyte cell; pericyte cell; proteoglycan;
KW   cartilage; inner ear utricular supporting cell; cytokine; A-peptide;
KW   factor VIIA; endothelial cell.
XX
OS   Homo sapiens.
XX
PN   US2003054517-A1.
XX
PD   20-MAR-2003.
XX
PF   08-MAY-2002; 2002US-00141755.
XX
PR   31-MAR-1997;   97WO-US005230.
PR   12-JUN-1998;   98WO-US012456.
PR   14-JUL-1998;   98WO-US014552.
PR   28-AUG-1998;   98WO-US017888.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98WO-US019093.
PR   14-SEP-1998;   98WO-US019094.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98WO-US019437.
PR   07-OCT-1998;   98WO-US021141.
PR   29-OCT-1998;   98WO-US022991.
PR   29-OCT-1998;   98WO-US022992.
PR   20-NOV-1998;   98WO-US024855.
PR   01-DEC-1998;   98WO-US025108.
PR   05-JAN-1999;   99WO-US000106.
PR   08-MAR-1999;   99WO-US005028.
PR   10-MAR-1999;   99WO-US005190.
PR   20-APR-1999;   99WO-US008615.
PR   14-MAY-1999;   99WO-US010733.
PR   02-JUN-1999;   99WO-US012252.
PR   01-SEP-1999;   99WO-US020111.
PR   08-SEP-1999;   99WO-US020594.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   30-NOV-1999;   99WO-US028409.
PR   01-DEC-1999;   99WO-US028301.
PR   01-DEC-1999;   99WO-US028634.
PR   02-DEC-1999;   99WO-US028551.
PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   20-DEC-1999;   99WO-US030999.
PR   22-DEC-1999;   99WO-US030720.
PR   30-DEC-1999;   99WO-US031243.
PR   30-DEC-1999;   99WO-US031274.
PR   05-JAN-2000; 2000WO-US000219.
```

PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-521854/49.
DR P-PSDB; ADA18822.
XX
PT New PRO nucleic acid, useful for preparing a composition for treating
PT e.g., tumors.
XX
PS Claim 2; Fig 221; 660pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. lung, colon, breast,
CC prostate, rectal, cervical and liver tumours). The polynucleotides are
CC useful in molecular biology, including uses as hybridisation probes, in
CC chromosome and gene mapping, in generating antisense RNA and DNA and in
CC gene therapy. The polynucleotides may also be used in preparing PRO
CC polypeptides by recombinant techniques and in generating either
CC transgenic animals or knock-out animals which are useful in the
CC development and screening of therapeutically useful reagents. The PRO
CC polypeptides or antibodies are used in preparing a medicament for
CC treating a condition responsive to the polypeptides or antibodies, such
CC as tumours, for modulating the uptake of glucose or FFA by adipocyte
CC cells, for stimulating the proliferation of or gene expression in
CC pericyte cells, for stimulating the release of proteoglycans from
CC cartilage, for stimulating the proliferation of inner ear utricular
CC supporting cells, for stimulating the release of cytokines from PBMC
CC cells, for inhibiting the binding of A-peptide to factor VIIA, for
CC inhibiting the differentiation of adipocyte cells and for stimulating the
CC proliferation of endothelial cells. This sequence represents a human PRO
CC polynucleotide of the invention. Note: The sequence data for this patent
CC is also available in electronic format from USPTO at
CC seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 153
ADA61444/c
ID ADA61444 standard; cDNA; 1129 BP.
XX
AC ADA61444;
XX
DT 20-NOV-2003 (first entry)
XX
DE Homo sapiens.
XX
KW Human; secreted and transmembrane protein; PRO; gene; ss;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inihibitor; cytokine release stimulator; tumour;
KW lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX
OS Novel.
OS human.
OS secreted.
OS and.
OS transmembrane.
OS protein.
OS PRO4327.
OS cDNA.
XX
PN US2003049816-A1.
XX
PD 13-MAR-2003.
XX
PF 15-APR-2002; 2002US-00123262.
XX
PR 31-MAR-1997; 97WO-US005230.

PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-695892/66.
DR P-PSDB; ADA61445.
XX
PT New PRO nucleic acid and encode polypeptides, are useful for
PT manufacturing a medicament for diagnosing or treating cancer.
XX
PS Claim 2; Fig 221; 660pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC a novel human secreted and transmembrane PRO polypeptide.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;

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  Matches   31;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy       2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
              || ||  ||||||  ||| ||| |  |   |||  ||||||||  ||
Db       1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083


RESULT 154
ADB19229/c
ID   ADB19229 standard; cDNA; 1129 BP.
XX
AC   ADB19229;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW   Human; secreted and transmembrane protein; PRO; gene; ss;
KW   Tumour necrosis factor alpha release; TNF-alpha release;
KW   glucose uptake modulator; FFA uptake modulator;
KW   cell proliferation stimulator; cell differentiation stimulator;
KW   cell differentiation inihibitor; cytokin.
XX
OS   Homo sapiens.
XX
PN   US2003068796-A1.
XX
PD   10-APR-2003.
XX
PF   15-APR-2002; 2002US-00123261.
XX
PR   31-MAR-1997;   97WO-US005230.
PR   12-JUN-1998;   98WO-US012456.
PR   14-JUL-1998;   98WO-US014552.
PR   28-AUG-1998;   98WO-US017888.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98WO-US019093.
PR   14-SEP-1998;   98WO-US019094.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98WO-US019437.
PR   07-OCT-1998;   98WO-US021141.
PR   29-OCT-1998;   98WO-US022991.
PR   29-OCT-1998;   98WO-US022992.
PR   20-NOV-1998;   98WO-US024855.
PR   01-DEC-1998;   98WO-US025108.
PR   05-JAN-1999;   99WO-US000106.
PR   08-MAR-1999;   99WO-US005028.
PR   10-MAR-1999;   99WO-US005190.
PR   20-APR-1999;   99WO-US008615.
PR   14-MAY-1999;   99WO-US010733.
PR   02-JUN-1999;   99WO-US012252.
PR   01-SEP-1999;   99WO-US020111.
PR   08-SEP-1999;   99WO-US020594.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   30-NOV-1999;   99WO-US028409.
PR   01-DEC-1999;   99WO-US028301.
PR   01-DEC-1999;   99WO-US028634.
PR   02-DEC-1999;   99WO-US028551.
PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   20-DEC-1999;   99WO-US030999.
PR   22-DEC-1999;   99WO-US030720.
PR   30-DEC-1999;   99WO-US031243.
PR   30-DEC-1999;   99WO-US031274.
PR   05-JAN-2000; 2000WO-US000219.
PR   06-JAN-2000; 2000WO-US000277.
PR   06-JAN-2000; 2000WO-US000376.
PR   11-FEB-2000; 2000WO-US003565.
PR   18-FEB-2000; 2000WO-US004341.
PR   18-FEB-2000; 2000WO-US004342.
PR   22-FEB-2000; 2000WO-US004414.
PR   24-FEB-2000; 2000WO-US004914.
PR   24-FEB-2000; 2000WO-US005004.
PR   01-MAR-2000; 2000WO-US005601.
PR   02-MAR-2000; 2000WO-US005746.
PR   02-MAR-2000; 2000WO-US005841.
PR   10-MAR-2000; 2000WO-US006319.
PR   15-MAR-2000; 2000WO-US006884.
PR   20-MAR-2000; 2000WO-US007377.
PR   21-MAR-2000; 2000WO-US007532.
PR   30-MAR-2000; 2000WO-US008439.
PR   17-MAY-2000; 2000WO-US013705.
PR   22-MAY-2000; 2000WO-US014042.
PR   30-MAY-2000; 2000WO-US014941.
PR   02-JUN-2000; 2000WO-US015264.
PR   28-JUL-2000; 2000WO-US020710.
PR   11-AUG-2000; 2000WO-US022031.
PR   23-AUG-2000; 2000WO-US023522.
PR   24-AUG-2000; 2000WO-US023328.
PR   08-NOV-2000; 2000WO-US030952.
PR   10-NOV-2000; 2000WO-US030873.
PR   01-DEC-2000; 2000WO-US032678.
PR   20-DEC-2000; 2000US-00747259.
PR   20-DEC-2000; 2000WO-US034956.
PR   28-FEB-2001; 2001US-00796498.
PR   28-FEB-2001; 2001WO-US006520.
PR   01-MAR-2001; 2001WO-US006666.
PR   09-MAR-2001; 2001US-00802706.
PR   14-MAR-2001; 2001US-00808689.
PR   22-MAR-2001; 2001US-00816744.
PR   05-APR-2001; 2001US-00828366.
PR   10-MAY-2001; 2001US-00854208.
PR   10-MAY-2001; 2001US-00854280.
PR   18-MAY-2001; 2001US-00860216.
PR   25-MAY-2001; 2001US-00866028.
PR   25-MAY-2001; 2001US-00866034.
PR   25-MAY-2001; 2001WO-US017092.
PR   01-JUN-2001; 2001US-00872035.
PR   01-JUN-2001; 2001WO-US017800.
PR   05-JUN-2001; 2001US-00874503.
PR   14-JUN-2001; 2001US-00882636.
PR   19-JUN-2001; 2001US-00886342.
PR   20-JUN-2001; 2001WO-US019692.
PR   21-JUN-2001; 2001US-00887879.
PR   22-JUN-2001; 2001WO-US020116.
PR   29-JUN-2001; 2001WO-US021066.
PR   09-JUL-2001; 2001WO-US021735.
PR   18-JUL-2001; 2001US-00908827.
PR   06-AUG-2001; 2001US-00924419.
PR   09-AUG-2001; 2001US-00927796.
PR   16-AUG-2001; 2001US-00931836.
PR   19-DEC-2001; 2001US-00028072.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Baker KP,  Beresini M,  Deforge L,  Desnoyers L,  Filvaroff E,  Gao W;
PI   Gerritsen ME,  Goddard A,  Godowski PJ,  Gurney AL,  Sherwood S;
PI   Smith V,  Stewart TA,  Tumas D,  Watanabe CK,  Wood WI,  Zhang Z;
XX
DR   WPI; 2003-695927/66.
DR   P-PSDB; ADB19230.
XX
PT   Novel secreted and transmembrane PRO polypeptides useful for stimulating
PT   the release of tumor necrosis factor alpha and detecting the presence of
PT   a tumor in a mammal.
XX
PS   Claim 2; Fig 221; 660pp; English.
XX
```

CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyt
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 155
ADB27770/c
ID ADB27770 standard; cDNA; 1129 BP.
XX
AC ADB27770;
XX
DT 20-NOV-2003 (first entry)
XX
DE cDNA encoding human PRO polypeptide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003082704-A1.
XX
PD 01-MAY-2003.
XX
PF 24-APR-2002; 2002US-00131819.
XX
PR 09-DEC-1999; 99US-0170262P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-765415/72.
DR P-PSDB; ADB27771.
XX
PT New PRO nucleic acid, useful for preparing a composition for treating
PT e.g., tumor or for tissue typing.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence encodes a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC the USPTO website at seqdata.uspto.gov.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 156
ADA86249/c
ID ADA86249 standard; cDNA; 1129 BP.
XX
AC ADA86249;
XX
DT 20-NOV-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; gene; ss;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inihibitor; cytokine release stimulator; tumour;
KW lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX
OS Homo sapiens.
XX
PN US2003082711-A1.
XX
PD 01-MAY-2003.
XX
PF 16-MAY-2002; 2002US-00147508.
XX
PR 02-JUL-1998; 98US-0091519P.
PR 02-JUN-1999; 99WO-US012252.
PR 07-JUL-1999; 99US-0143048P.
PR 25-AUG-1999; 99US-00380137.
PR 30-MAR-2000; 2000WO-US008439.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;

PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786914/74.
DR P-PSDB; ADA86250.
XX
PT New PRO nucleic acid, useful for preparing a composition for treating
PT e.g., tumor or for tissue typing.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC a novel human secreted and transmembrane PRO polypeptide.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 157
ADB15813/c
ID ADB15813 standard; cDNA; 1129 BP.
XX
AC ADB15813;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003087350-A1.
XX
PD 08-MAY-2003.
XX
PF 22-APR-2002; 2002US-00127821.
XX
PR 04-AUG-1998; 98US-0095301P.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380137.
PR 30-MAR-2000; 2000WO-US008439.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786941/74.
DR P-PSDB; ADB15814.
XX
PT New PRO nucleic acid, useful for preparing a recombinant PRO polypeptide,
PT and for manufacturing a medicament for diagnosing or treating tumor.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 158
ADA47599/c
ID ADA47599 standard; cDNA; 1129 BP.
XX
AC ADA47599;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003073215-A1.
XX
PD 17-APR-2003.
XX
PF 07-MAY-2002; 2002US-00140925.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-644801/61.
DR P-PSDB; ADA47600.
XX
PT New secreted and transmembrane PRO polypeptides and nucleic acids, useful
PT in gene therapy, detecting the presence of tumor in a mammal, or
PT modulating the uptake of glucose or free fatty acid by skeletal muscle
PT cells or adipocyte cells.
XX
PS Claim 2; Fig 221; 659pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and

```
CC   transmembrane polypeptides) and the polynucleotides encoding them. The
CC   invention also relates to an antibody which specifically binds to a PRO
CC   polypeptide, a method for stimulating the release of tumour necrosis
CC   factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC   proliferation or differentiation of chondrocyte cells and a method for
CC   detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC   colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC   polynucleotides are useful in molecular biology, including uses as
CC   hybridisation probes, in chromosome and gene mapping, in generating
CC   antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC   be used in preparing PRO polypeptides by recombinant techniques and in
CC   generating either transgenic animals or knock-out animals which are
CC   useful in the development and screening of therapeutically useful
CC   reagents. The PRO polypeptides or antibodies are used in preparing a
CC   medicament for treating a condition responsive to the polypeptides or
CC   antibodies, such as tumours, for stimulating and inhibiting proliferation
CC   of human microvascular endothelial cells, for modulating the uptake of
CC   glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC   stimulating differentiation of adipocyte cells, for stimulating
CC   proliferation of or gene expression in pericyte cells, for stimulating
CC   the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC   cells, for inducing endothelial cell tube formation and for treating
CC   various bone and/or cartilage disorders such as sports injuries and
CC   arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC   from cartilage are useful for treating sports-related joint problems,
CC   articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC   polypeptides are also useful for treating various mammalian haemoglobin-
CC   associated disorders such as various thalassaemias and conditions which
CC   may benefit from enhanced local immune system cell infiltration. This
CC   sequence represents a human PRO polynucleotide of the invention. Note:
CC   The sequence data for this patent is also available in electronic format
CC   from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ   Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 21.4;  DB 1;  Length 1129;
  Best Local Similarity   66.0%;  Pred. No. 95;
  Matches   31;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy       2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
             || ||  ||||||  ||| ||| |  |   |||  ||||||||  ||
Db       1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083


RESULT 159
ADA67394/c
ID   ADA67394 standard; cDNA; 1129 BP.
XX
AC   ADA67394;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Human PRO polynucleotide #111.
XX
KW   Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW   tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW   cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW   liver; microvascular endothelial cell; glucose; FFA;
KW   skeletal muscle cell; adipocyte cell; pericyte cell;
KW   inner ear utricular supporting cell; T-lymphocyte cell;
KW   endothelial cell tube formation; bone disorder; cartilage disorder;
KW   sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW   rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW   immune system cell infiltration.
XX
OS   Homo sapiens.
XX
PN   US2003068795-A1.
XX
PD   10-APR-2003.
XX
PF   15-APR-2002; 2002US-00123236.
XX
PR   31-MAR-1997;   97WO-US005230.
PR   12-JUN-1998;   98WO-US012456.
PR   14-JUL-1998;   98WO-US014552.
PR   28-AUG-1998;   98WO-US017888.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98WO-US019093.
PR   14-SEP-1998;   98WO-US019094.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98WO-US019437.
PR   07-OCT-1998;   98WO-US021141.
PR   29-OCT-1998;   98WO-US022991.
PR   29-OCT-1998;   98WO-US022992.
PR   20-NOV-1998;   98WO-US024855.
PR   01-DEC-1998;   98WO-US025108.
PR   05-JAN-1999;   99WO-US000106.
PR   08-MAR-1999;   99WO-US005028.
PR   10-MAR-1999;   99WO-US005190.
PR   20-APR-1999;   99WO-US008615.
PR   14-MAY-1999;   99WO-US010733.
PR   02-JUN-1999;   99WO-US012252.
PR   01-SEP-1999;   99WO-US020111.
PR   08-SEP-1999;   99WO-US020594.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   30-NOV-1999;   99WO-US028409.
PR   01-DEC-1999;   99WO-US028301.
PR   01-DEC-1999;   99WO-US028634.
PR   02-DEC-1999;   99WO-US028551.
PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   20-DEC-1999;   99WO-US030999.
PR   22-DEC-1999;   99WO-US030720.
PR   30-DEC-1999;   99WO-US031243.
PR   30-DEC-1999;   99WO-US031274.
PR   05-JAN-2000; 2000WO-US000219.
PR   06-JAN-2000; 2000WO-US000277.
PR   06-JAN-2000; 2000WO-US000376.
PR   11-FEB-2000; 2000WO-US003565.
PR   18-FEB-2000; 2000WO-US004341.
PR   18-FEB-2000; 2000WO-US004342.
PR   22-FEB-2000; 2000WO-US004414.
PR   24-FEB-2000; 2000WO-US004914.
PR   24-FEB-2000; 2000WO-US005004.
PR   01-MAR-2000; 2000WO-US005601.
PR   02-MAR-2000; 2000WO-US005746.
PR   02-MAR-2000; 2000WO-US005841.
PR   10-MAR-2000; 2000WO-US006319.
PR   15-MAR-2000; 2000WO-US006884.
PR   20-MAR-2000; 2000WO-US007377.
PR   21-MAR-2000; 2000WO-US007532.
PR   30-MAR-2000; 2000WO-US008439.
PR   17-MAY-2000; 2000WO-US013705.
PR   22-MAY-2000; 2000WO-US014042.
PR   30-MAY-2000; 2000WO-US014941.
PR   02-JUN-2000; 2000WO-US015264.
PR   28-JUL-2000; 2000WO-US020710.
PR   11-AUG-2000; 2000WO-US022031.
PR   23-AUG-2000; 2000WO-US023522.
PR   24-AUG-2000; 2000WO-US023328.
PR   08-NOV-2000; 2000WO-US030952.
PR   10-NOV-2000; 2000WO-US030873.
PR   01-DEC-2000; 2000WO-US032678.
PR   20-DEC-2000; 2000US-00747259.
PR   20-DEC-2000; 2000WO-US034956.
PR   28-FEB-2001; 2001US-00796498.
PR   28-FEB-2001; 2001WO-US006520.
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PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-695926/66.
DR P-PSDB; ADA67395.
XX
PT Novel isolated PRO secreted and transmembrane polypeptides useful for
PT stimulating the release of tumor necrosis factor-alpha from human blood
PT and detecting the presence of a tumor in a mammal.
XX
PS Claim 2; Fig 221; 660pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:

CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 160
ADB30401/c
ID ADB30401 standard; cDNA; 1129 BP.
XX
AC ADB30401;
XX
DT 20-NOV-2003 (first entry)
XX
DE cDNA encoding human PRO polypeptide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003068794-A1.
XX
PD 10-APR-2003.
XX
PF 15-APR-2002; 2002US-00123155.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.

PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-708391/67.
DR P-PSDB; ADB30402.
XX
PT New isolated PRO polypeptides e.g. PRO1801 and PRO1114, useful in the
PT preparation of a medicament for treating a condition responsive to PRO
PT polypeptide, and as therapeutic agents e.g. vaccines.
XX
PS Claim 2; Fig 221; 660pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence encodes a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC the USPTO website at seqdata.uspto.gov.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 161
ADA85697/c
ID ADA85697 standard; cDNA; 1129 BP.
XX
AC ADA85697;
XX
DT 20-NOV-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; gene; ss;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inihibitor; cytokine release stimulator; tumour;
KW lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;

KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX
OS Homo sapiens.
XX
PN US2003082693-A1.
XX
PD 01-MAY-2003.
XX
PF 22-APR-2002; 2002US-00127843.
XX
PR 05-JUN-2000; 2000US-0209832P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786907/74.
DR P-PSDB; ADA85698.
XX
PT New PRO nucleic acid, useful for preparing a composition for treating
PT e.g., tumor or for tissue typing.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC a novel human secreted and transmembrane PRO polypeptide.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 162
ADA96909/c
ID ADA96909 standard; cDNA; 1129 BP.
XX
AC ADA96909;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003082705-A1.
XX
PD 01-MAY-2003.
XX
PF 24-APR-2002; 2002US-00131829.
XX
PR 09-DEC-1999; 99US-0170262P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755112/71.
DR P-PSDB; ADA96910.
XX
PT New PRO nucleic acid, useful for preparing a composition for treating
PT e.g., tumor or for tissue typing.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This

```
CC   sequence represents a human PRO polynucleotide of the invention. Note:
CC   The sequence data for this patent is also available in electronic format
CC   from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ   Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 21.4;  DB 1;  Length 1129;
  Best Local Similarity   66.0%;  Pred. No. 95;
  Matches   31;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy       2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
             || ||  ||||||  ||| ||| |  |   |||  ||||||||  ||
Db       1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083


RESULT 163
ADA79213/c
ID   ADA79213 standard; cDNA; 1129 BP.
XX
AC   ADA79213;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Human PRO polynucleotide #111.
XX
KW   Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW   tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW   cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW   liver; microvascular endothelial cell; glucose; FFA;
KW   skeletal muscle cell; adipocyte cell; pericyte cell;
KW   inner ear utricular supporting cell; T-lymphocyte cell;
KW   endothelial cell tube formation; bone disorder; cartilage disorder;
KW   sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW   rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW   immune system cell infiltration.
XX
OS   Homo sapiens.
XX
PN   US2003082763-A1.
XX
PD   01-MAY-2003.
XX
PF   17-APR-2002; 2002US-00124818.
XX
PR   31-MAR-1997;   97WO-US005230.
PR   12-JUN-1998;   98WO-US012456.
PR   14-JUL-1998;   98WO-US014552.
PR   28-AUG-1998;   98WO-US017888.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98WO-US019093.
PR   14-SEP-1998;   98WO-US019094.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98WO-US019437.
PR   07-OCT-1998;   98WO-US021141.
PR   29-OCT-1998;   98WO-US022991.
PR   29-OCT-1998;   98WO-US022992.
PR   20-NOV-1998;   98WO-US024855.
PR   01-DEC-1998;   98WO-US025108.
PR   05-JAN-1999;   99WO-US000106.
PR   08-MAR-1999;   99WO-US005028.
PR   10-MAR-1999;   99WO-US005190.
PR   20-APR-1999;   99WO-US008615.
PR   14-MAY-1999;   99WO-US010733.
PR   02-JUN-1999;   99WO-US012252.
PR   01-SEP-1999;   99WO-US020111.
PR   08-SEP-1999;   99WO-US020594.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   30-NOV-1999;   99WO-US028409.
PR   01-DEC-1999;   99WO-US028301.
PR   01-DEC-1999;   99WO-US028634.
PR   02-DEC-1999;   99WO-US028551.
PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   20-DEC-1999;   99WO-US030999.
PR   22-DEC-1999;   99WO-US030720.
PR   30-DEC-1999;   99WO-US031243.
PR   30-DEC-1999;   99WO-US031274.
PR   05-JAN-2000; 2000WO-US000219.
PR   06-JAN-2000; 2000WO-US000277.
PR   06-JAN-2000; 2000WO-US000376.
PR   11-FEB-2000; 2000WO-US003565.
PR   18-FEB-2000; 2000WO-US004341.
PR   18-FEB-2000; 2000WO-US004342.
PR   22-FEB-2000; 2000WO-US004414.
PR   24-FEB-2000; 2000WO-US004914.
PR   24-FEB-2000; 2000WO-US005004.
PR   01-MAR-2000; 2000WO-US005601.
PR   02-MAR-2000; 2000WO-US005746.
PR   02-MAR-2000; 2000WO-US005841.
PR   10-MAR-2000; 2000WO-US006319.
PR   15-MAR-2000; 2000WO-US006884.
PR   20-MAR-2000; 2000WO-US007377.
PR   21-MAR-2000; 2000WO-US007532.
PR   30-MAR-2000; 2000WO-US008439.
PR   17-MAY-2000; 2000WO-US013705.
PR   22-MAY-2000; 2000WO-US014042.
PR   30-MAY-2000; 2000WO-US014941.
PR   02-JUN-2000; 2000WO-US015264.
PR   28-JUL-2000; 2000WO-US020710.
PR   11-AUG-2000; 2000WO-US022031.
PR   23-AUG-2000; 2000WO-US023522.
PR   24-AUG-2000; 2000WO-US023328.
PR   08-NOV-2000; 2000WO-US030952.
PR   10-NOV-2000; 2000WO-US030873.
PR   01-DEC-2000; 2000WO-US032678.
PR   20-DEC-2000; 2000US-00747259.
PR   20-DEC-2000; 2000WO-US034956.
PR   28-FEB-2001; 2001US-00796498.
PR   28-FEB-2001; 2001WO-US006520.
PR   01-MAR-2001; 2001WO-US006666.
PR   09-MAR-2001; 2001US-00802706.
PR   14-MAR-2001; 2001US-00808689.
PR   22-MAR-2001; 2001US-00816744.
PR   05-APR-2001; 2001US-00828366.
PR   10-MAY-2001; 2001US-00854208.
PR   10-MAY-2001; 2001US-00854280.
PR   18-MAY-2001; 2001US-00860216.
PR   25-MAY-2001; 2001US-00866028.
PR   25-MAY-2001; 2001US-00866034.
PR   25-MAY-2001; 2001WO-US017092.
PR   01-JUN-2001; 2001US-00872035.
PR   01-JUN-2001; 2001WO-US017800.
PR   05-JUN-2001; 2001US-00874503.
PR   14-JUN-2001; 2001US-00882636.
PR   19-JUN-2001; 2001US-00886342.
PR   20-JUN-2001; 2001WO-US019692.
PR   21-JUN-2001; 2001US-00887879.
PR   22-JUN-2001; 2001WO-US020116.
PR   29-JUN-2001; 2001WO-US021066.
PR   09-JUL-2001; 2001WO-US021735.
PR   18-JUL-2001; 2001US-00908827.
PR   06-AUG-2001; 2001US-00924419.
PR   09-AUG-2001; 2001US-00927796.
PR   16-AUG-2001; 2001US-00931836.
PR   19-DEC-2001; 2001US-00028072.
XX
PA   (GETH ) GENENTECH INC.
XX
```

PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755116/71.
DR P-PSDB; ADA79214.
XX
PT New secreted and transmembrane PRO polypeptides and nucleic acids, useful
PT in detection and treatment of cancer and in modulating the uptake of
PT glucose or free fatty acid by skeletal muscle cells or adipocyte cells.
XX
PS Claim 2; Fig 221; 659pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 164
ADA87352/c
ID ADA87352 standard; cDNA; 1129 BP.
XX
AC ADA87352;
XX
DT 20-NOV-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; gene; ss;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inihibitor; cytokine release stimulator; tumour;
KW lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX
OS Homo sapiens.
XX
PN US2003087345-A1.
XX
PD 08-MAY-2003.
XX
PF 16-APR-2002; 2002US-00123907.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 10-MAR-1999; 2000WO-US006319.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.

PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786937/74.
DR P-PSDB; ADA87353.
XX
PT New PRO nucleic acid, useful for manufacturing a medicament for
PT diagnosing or treating tumor.
XX
PS Claim 2; Fig 221; 638pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC a novel human secreted and transmembrane PRO polypeptide.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 165
ADB16554/c
ID ADB16554 standard; cDNA; 1129 BP.
XX
AC ADB16554;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003087349-A1.
XX
PD 08-MAY-2003.
XX
PF 19-APR-2002; 2002US-00125928.
XX
PR 19-JUN-1998; 98US-0089947P.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380137.
PR 02-MAR-2000; 2000WO-US005841.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786940/74.
DR P-PSDB; ADB16555.
XX
PT New PRO nucleic acid, useful for preparing a recombinant PRO polypeptide,
PT and for manufacturing a medicament for diagnosing or treating tumor.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO

CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

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  Query Match             0.8%;  Score 21.4;  DB 1;  Length 1129;
  Best Local Similarity   66.0%;  Pred. No. 95;
  Matches   31;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy       2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
             || ||  |||||| ||| ||| |  |   |||  |||||||| ||
Db       1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083
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RESULT 166
ADA91646/c
ID ADA91646 standard; cDNA; 1129 BP.
XX
AC ADA91646;
XX
DT 20-NOV-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; gene; ss;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inihibitor; cytokine release stimulator; tumour;
KW lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX
OS Homo sapiens.
XX
PN US2003082694-A1.
XX
PD 01-MAY-2003.
XX
PF 22-APR-2002; 2002US-00127845.
XX
PR 03-MAR-2000; 2000US-0187202P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786908/74.
DR P-PSDB; ADA91647.
XX
PT New PRO nucleic acid, useful for preparing a recombinant PRO polypeptide,
PT or a composition for treating e.g., tumor or for tissue typing.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC a novel human secreted and transmembrane PRO polypeptide.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

```
  Query Match             0.8%;  Score 21.4;  DB 1;  Length 1129;
  Best Local Similarity   66.0%;  Pred. No. 95;
  Matches   31;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy       2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
             || ||  |||||| ||| ||| |  |   |||  |||||||| ||
Db       1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083
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RESULT 167
ADB14709/c
ID ADB14709 standard; cDNA; 1129 BP.
XX
AC ADB14709;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;

KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003087351-A1.
XX
PD 08-MAY-2003.
XX
PF 22-APR-2002; 2002US-00127822.
XX
PR 17-JUN-1998; 98US-0089532P.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380137.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786942/74.
DR P-PSDB; ADB14710.
XX
PT New PRO nucleic acid, useful for manufacturing a medicament for
PT diagnosing or treating tumor.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||

Db 1129 TTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 168
ADB18670/c
ID ADB18670 standard; cDNA; 1129 BP.
XX
AC ADB18670;
XX
DT 20-NOV-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; gene; ss;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inihibitor; cytokin.
XX
OS Homo sapiens.
XX
PN US2003073211-A1.
XX
PD 17-APR-2003.
XX
PF 15-APR-2002; 2002US-00123292.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.

PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-695954/66.
DR P-PSDB; ADB18671.
XX
PT New isolated nucleic acid and encoded PRO polypeptide, are useful in the
PT diagnosis and treatment of cancer.
XX
PS Claim 2; Fig 221; 638pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyt
XX

SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 169
ADA93885/c
ID ADA93885 standard; cDNA; 1129 BP.
XX
AC ADA93885;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003077722-A1.
XX
PD 24-APR-2003.
XX
PF 03-MAY-2002; 2002US-00137872.
XX
PR 03-MAR-2000; 2000US-0187202P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755077/71.
DR P-PSDB; ADA93886.
XX
PT New isolated, secreted and transmembrane PRO nucleic acid, useful for the
PT diagnosis, prevention and/or treatment of tumors, such as lung, colon,
PT breast, prostate, rectal, cervical and/or liver tumors.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful

CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 170
ADB19781/c
ID ADB19781 standard; cDNA; 1129 BP.
XX
AC ADB19781;
XX
DT 20-NOV-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; gene; ss;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inihibitor; cytokine release stimulator; tumour;
KW lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX
OS Homo sapiens.
XX
PN US2003082691-A1.
XX
PD 01-MAY-2003.
XX
PF 22-APR-2002; 2002US-00127838.
XX
PR 17-NOV-1998; 98US-0108802P.
PR 01-SEP-1999; 99WO-US020111.
PR 18-OCT-1999; 99US-00403297.
PR 18-FEB-2000; 2000WO-US004342.
PR 02-JUN-2000; 2000WO-US015264.
PR 23-AUG-2000; 2000WO-US023522.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755108/71.
DR P-PSDB; ADB19782.
XX
PT PRO nucleic acid, useful for preparing a composition for treating e.g.,
PT tumor or for tissue typing.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC a novel human secreted and transmembrane PRO polypeptide.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 171
ADB13093/c
ID ADB13093 standard; cDNA; 1129 BP.
XX
AC ADB13093;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003082710-A1.
XX

PD 01-MAY-2003.
XX
PF 16-MAY-2002; 2002US-00147484.
XX
PR 09-DEC-1999; 99US-0170262P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786913/74.
DR P-PSDB; ADB13094.
XX
PT New PRO nucleic acid, useful for preparing a recombinant PRO polypeptide,
PT preparing a composition for treating e.g., tumor, or for tissue typing.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 172
ACD98534/c
ID ACD98534 standard; cDNA; 1129 BP.
XX
AC ACD98534;
XX
DT 26-SEP-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; gene therapy;
KW chromosome identification; tissue typing; gene; ss.
XX
OS Homo sapiens.
XX
PN US2003044945-A1.
XX
PD 06-MAR-2003.
XX
PF 10-MAY-2002; 2002US-00142419.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.

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PR   17-MAY-2000; 2000WO-US013705.
PR   22-MAY-2000; 2000WO-US014042.
PR   30-MAY-2000; 2000WO-US014941.
PR   02-JUN-2000; 2000WO-US015264.
PR   28-JUL-2000; 2000WO-US020710.
PR   11-AUG-2000; 2000WO-US022031.
PR   23-AUG-2000; 2000WO-US023522.
PR   24-AUG-2000; 2000WO-US023328.
PR   08-NOV-2000; 2000WO-US030952.
PR   10-NOV-2000; 2000WO-US030873.
PR   01-DEC-2000; 2000WO-US032678.
PR   20-DEC-2000; 2000US-00747259.
PR   20-DEC-2000; 2000WO-US034956.
PR   28-FEB-2001; 2001US-00796498.
PR   28-FEB-2001; 2001WO-US006520.
PR   01-MAR-2001; 2001WO-US006666.
PR   09-MAR-2001; 2001US-00802706.
PR   14-MAR-2001; 2001US-00808689.
PR   22-MAR-2001; 2001US-00816744.
PR   05-APR-2001; 2001US-00828366.
PR   10-MAY-2001; 2001US-00854208.
PR   10-MAY-2001; 2001US-00854280.
PR   18-MAY-2001; 2001US-00860216.
PR   25-MAY-2001; 2001US-00866028.
PR   25-MAY-2001; 2001US-00866034.
PR   25-MAY-2001; 2001WO-US017092.
PR   01-JUN-2001; 2001US-00872035.
PR   01-JUN-2001; 2001WO-US017800.
PR   05-JUN-2001; 2001US-00874503.
PR   14-JUN-2001; 2001US-00882636.
PR   19-JUN-2001; 2001US-00886342.
PR   20-JUN-2001; 2001WO-US019692.
PR   21-JUN-2001; 2001US-00887879.
PR   22-JUN-2001; 2001WO-US020116.
PR   29-JUN-2001; 2001WO-US021066.
PR   09-JUL-2001; 2001WO-US021735.
PR   18-JUL-2001; 2001US-00908827.
PR   06-AUG-2001; 2001US-00924419.
PR   09-AUG-2001; 2001US-00927796.
PR   16-AUG-2001; 2001US-00931836.
PR   19-DEC-2001; 2001US-00028072.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI   Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI   Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR   WPI; 2003-492275/46.
DR   P-PSDB; ABO43259.
XX
PT   New transmembrane polypeptides and nucleic acids encoding the
PT   polypeptides, useful in gene therapy, in chromosome identification, as
PT   chromosome markers, or in generating probes.
XX
PS   Claim 2; Fig 221; 660pp; English.
XX
CC   The invention describes an isolated nucleic acid encoding a PRO (secreted
CC   and transmembrane) polypeptide. Nucleic acids which encode PRO can be
CC   used to generate either transgenic animals or knock-out animals useful in
CC   developing and screening of therapeutically useful reagents. The nucleic
CC   acids may also be used in gene therapy, in chromosome identification, as
CC   chromosome markers, or in generating probes. The PRO polypeptides are
CC   useful as molecular markers for protein electrophoresis, and the isolated
CC   nucleic acids may be used for recombinantly expressing those markers. The
CC   PRO polypeptides and nucleic acids may also be used in tissue typing.
CC   Anti-PRO antibodies are useful in diagnostic assays for PRO, and in
CC   affinity purification of PRO from recombinant cell culture or natural
CC   sources. This sequence encodes a novel human secreted and transmembrane
CC   PRO polypeptide
XX
SQ   Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;
```

```
  Query Match             0.8%;  Score 21.4;  DB 1;  Length 1129;
  Best Local Similarity   66.0%;  Pred. No. 95;
  Matches   31;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy       2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
             || ||  ||||||  ||| ||| |  |  |||  ||||||||  ||
Db       1129 TTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083


RESULT 173
ADA74347/c
ID   ADA74347 standard; cDNA; 1129 BP.
XX
AC   ADA74347;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Human PRO polynucleotide #111.
XX
KW   Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW   tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW   cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW   liver; microvascular endothelial cell; glucose; FFA;
KW   skeletal muscle cell; adipocyte cell; pericyte cell;
KW   inner ear utricular supporting cell; T-lymphocyte cell;
KW   endothelial cell tube formation; bone disorder; cartilage disorder;
KW   sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW   rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW   immune system cell infiltration.
XX
OS   Homo sapiens.
XX
PN   US2003068798-A1.
XX
PD   10-APR-2003.
XX
PF   07-MAY-2002; 2002US-00140928.
XX
PR   31-MAR-1997;   97WO-US005230.
PR   12-JUN-1998;   98WO-US012456.
PR   14-JUL-1998;   98WO-US014552.
PR   28-AUG-1998;   98WO-US017888.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98WO-US019093.
PR   14-SEP-1998;   98WO-US019094.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98WO-US019437.
PR   07-OCT-1998;   98WO-US021141.
PR   29-OCT-1998;   98WO-US022991.
PR   29-OCT-1998;   98WO-US022992.
PR   20-NOV-1998;   98WO-US024855.
PR   01-DEC-1998;   98WO-US025108.
PR   05-JAN-1999;   99WO-US000106.
PR   08-MAR-1999;   99WO-US005028.
PR   10-MAR-1999;   99WO-US005190.
PR   20-APR-1999;   99WO-US008615.
PR   14-MAY-1999;   99WO-US010733.
PR   02-JUN-1999;   99WO-US012252.
PR   01-SEP-1999;   99WO-US020111.
PR   08-SEP-1999;   99WO-US020594.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   30-NOV-1999;   99WO-US028409.
PR   01-DEC-1999;   99WO-US028301.
PR   01-DEC-1999;   99WO-US028634.
PR   02-DEC-1999;   99WO-US028551.
PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
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PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-625490/59.
DR P-PSDB; ADA74348.
XX
PT Novel secreted and transmembrane PRO polypeptides and polynucleotides
PT encoding them, useful for treating bone disorders, arthritis, heart
PT attack, injuries, tumors, and stimulating release of Tumor Necrosis
PT Factor-alpha from human blood.
XX
PS Claim 2; Fig 221; 659pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 174
ADB24580/c
ID ADB24580 standard; cDNA; 1129 BP.
XX
AC ADB24580;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polynucleotide SEQ ID NO 221.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.

XX
OS Homo sapiens.
XX
PN US2003077713-A1.
XX
PD 24-APR-2003.
XX
PF 22-APR-2002; 2002US-00127839.
XX
PR 05-JUN-2000; 2000US-0209832P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755068/71.
DR P-PSDB; ADB24581.
XX
PT New isolated, secreted and transmembrane PRO polypeptides and nucleic
PT acids, useful for the diagnosis, prevention and/or treatment of tumors,
PT such as lung, colon, breast, prostate, rectal, cervical and/or liver
PT tumors.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 175
ADA82104/c
ID ADA82104 standard; cDNA; 1129 BP.
XX
AC ADA82104;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003082701-A1.
XX
PD 01-MAY-2003.
XX
PF 23-APR-2002; 2002US-00128686.
XX
PR 31-AUG-1998; 98US-0098525P.
PR 16-SEP-1998; 98US-0100634P.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380137.
PR 30-MAR-2000; 2000WO-US008439.
PR 02-JUN-2000; 2000WO-US015264.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755110/71.
DR P-PSDB; ADA82105.
XX
PT PRO nucleic acid, useful for preparing a composition for treating e.g.,
PT tumor or for tissue typing.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating

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CC   proliferation of or gene expression in pericyte cells, for stimulating
CC   the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC   cells, for inducing endothelial cell tube formation and for treating
CC   various bone and/or cartilage disorders such as sports injuries and
CC   arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC   from cartilage are useful for treating sports-related joint problems,
CC   articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC   polypeptides are also useful for treating various mammalian haemoglobin-
CC   associated disorders such as various thalassaemias and conditions which
CC   may benefit from enhanced local immune system cell infiltration. This
CC   sequence represents a human PRO polynucleotide of the invention. Note:
CC   The sequence data for this patent is also available in electronic format
CC   from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ   Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 21.4;  DB 1;  Length 1129;
  Best Local Similarity   66.0%;  Pred. No. 95;
  Matches   31;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy       2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
             || ||  ||||||  ||| ||| |  |   |||  |||||||  ||
Db       1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083


RESULT 176
ADA75067/c
ID   ADA75067 standard; cDNA; 1129 BP.
XX
AC   ADA75067;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Human PRO polynucleotide #111.
XX
KW   Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW   tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW   cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW   liver; microvascular endothelial cell; glucose; FFA;
KW   skeletal muscle cell; adipocyte cell; pericyte cell;
KW   inner ear utricular supporting cell; T-lymphocyte cell;
KW   endothelial cell tube formation; bone disorder; cartilage disorder;
KW   sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW   rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW   immune system cell infiltration.
XX
OS   Homo sapiens.
XX
PN   US2003073216-A1.
XX
PD   17-APR-2003.
XX
PF   30-MAY-2002; 2002US-00160498.
XX
PR   31-MAR-1997;   97WO-US005230.
PR   12-JUN-1998;   98WO-US012456.
PR   14-JUL-1998;   98WO-US014552.
PR   28-AUG-1998;   98WO-US017888.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98WO-US019093.
PR   14-SEP-1998;   98WO-US019094.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98WO-US019437.
PR   07-OCT-1998;   98WO-US021141.
PR   29-OCT-1998;   98WO-US022991.
PR   29-OCT-1998;   98WO-US022992.
PR   20-NOV-1998;   98WO-US024855.
PR   01-DEC-1998;   98WO-US025108.
PR   05-JAN-1999;   99WO-US000106.
PR   08-MAR-1999;   99WO-US005028.
PR   10-MAR-1999;   99WO-US005190.
PR   20-APR-1999;   99WO-US008615.
PR   14-MAY-1999;   99WO-US010733.
PR   02-JUN-1999;   99WO-US012252.
PR   01-SEP-1999;   99WO-US020111.
PR   08-SEP-1999;   99WO-US020594.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   30-NOV-1999;   99WO-US028409.
PR   01-DEC-1999;   99WO-US028301.
PR   01-DEC-1999;   99WO-US028634.
PR   02-DEC-1999;   99WO-US028551.
PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   20-DEC-1999;   99WO-US030999.
PR   22-DEC-1999;   99WO-US030720.
PR   30-DEC-1999;   99WO-US031243.
PR   30-DEC-1999;   99WO-US031274.
PR   05-JAN-2000; 2000WO-US000219.
PR   06-JAN-2000; 2000WO-US000277.
PR   06-JAN-2000; 2000WO-US000376.
PR   11-FEB-2000; 2000WO-US003565.
PR   18-FEB-2000; 2000WO-US004341.
PR   18-FEB-2000; 2000WO-US004342.
PR   22-FEB-2000; 2000WO-US004414.
PR   24-FEB-2000; 2000WO-US004914.
PR   24-FEB-2000; 2000WO-US005004.
PR   01-MAR-2000; 2000WO-US005601.
PR   02-MAR-2000; 2000WO-US005746.
PR   02-MAR-2000; 2000WO-US005841.
PR   10-MAR-2000; 2000WO-US006319.
PR   15-MAR-2000; 2000WO-US006884.
PR   20-MAR-2000; 2000WO-US007377.
PR   21-MAR-2000; 2000WO-US007532.
PR   30-MAR-2000; 2000WO-US008439.
PR   17-MAY-2000; 2000WO-US013705.
PR   22-MAY-2000; 2000WO-US014042.
PR   30-MAY-2000; 2000WO-US014941.
PR   02-JUN-2000; 2000WO-US015264.
PR   28-JUL-2000; 2000WO-US020710.
PR   11-AUG-2000; 2000WO-US022031.
PR   23-AUG-2000; 2000WO-US023522.
PR   24-AUG-2000; 2000WO-US023328.
PR   08-NOV-2000; 2000WO-US030952.
PR   10-NOV-2000; 2000WO-US030873.
PR   01-DEC-2000; 2000WO-US032678.
PR   20-DEC-2000; 2000US-00747259.
PR   20-DEC-2000; 2000WO-US034956.
PR   28-FEB-2001; 2001US-00796498.
PR   28-FEB-2001; 2001WO-US006520.
PR   01-MAR-2001; 2001WO-US006666.
PR   09-MAR-2001; 2001US-00802706.
PR   14-MAR-2001; 2001US-00808689.
PR   22-MAR-2001; 2001US-00816744.
PR   05-APR-2001; 2001US-00828366.
PR   10-MAY-2001; 2001US-00854208.
PR   10-MAY-2001; 2001US-00854280.
PR   18-MAY-2001; 2001US-00860216.
PR   25-MAY-2001; 2001US-00866028.
PR   25-MAY-2001; 2001US-00866034.
PR   25-MAY-2001; 2001WO-US017092.
PR   01-JUN-2001; 2001US-00872035.
PR   01-JUN-2001; 2001WO-US017800.
PR   05-JUN-2001; 2001US-00874503.
PR   14-JUN-2001; 2001US-00882636.
PR   19-JUN-2001; 2001US-00886342.
PR   20-JUN-2001; 2001WO-US019692.
PR   21-JUN-2001; 2001US-00887879.
PR   22-JUN-2001; 2001WO-US020116.
```

PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-765392/72.
DR P-PSDB; ADA75068.
XX
PT New secreted and transmembrane PRO polypeptides useful for stimulating
PT the release of tumor necrosis factor alpha in human blood and detecting
PT the presence of tumor in a mammal.
XX
PS Claim 2; Fig 221; 638pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 177
ADA85145/c
ID ADA85145 standard; cDNA; 1129 BP.
XX
AC ADA85145;
XX
DT 20-NOV-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; gene; ss;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inihibitor; cytokine release stimulator; tumour;
KW lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX
OS Homo sapiens.
XX
PN US2003082695-A1.
XX
PD 01-MAY-2003.
XX
PF 22-APR-2002; 2002US-00127846.
XX
PR 03-MAR-2000; 2000US-0187202P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786909/74.
DR P-PSDB; ADA85146.
XX
PT New nucleic acid encoding a PRO polypeptide, useful for preparing a
PT composition for treating e.g. tumor by gene therapy, or for tissue
PT typing.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC a novel human secreted and transmembrane PRO polypeptide.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;

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  Best Local Similarity   66.0%;  Pred. No. 95;
  Matches   31;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy       2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
             || ||  ||||||  ||| ||| |  |   |||  |||||||  ||
Db       1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083


RESULT 178
ADA84593/c
ID   ADA84593 standard; cDNA; 1129 BP.
XX
AC   ADA84593;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW   Human; secreted and transmembrane protein; PRO; gene; ss;
KW   Tumour necrosis factor alpha release; TNF-alpha release;
KW   glucose uptake modulator; FFA uptake modulator;
KW   cell proliferation stimulator; cell differentiation stimulator;
KW   cell differentiation inihibitor; cytokine release stimulator; tumour;
KW   lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW   cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW   gene therapy; chromosome identification; chromosome marker.
XX
OS   Homo sapiens.
XX
PN   US2003082708-A1.
XX
PD   01-MAY-2003.
XX
PF   15-MAY-2002; 2002US-00146729.
XX
PR   05-JUN-2000; 2000US-0209832P.
PR   01-DEC-2000; 2000WO-US032678.
PR   19-DEC-2001; 2001US-00028072.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI   Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI   Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR   WPI; 2003-786911/74.
DR   P-PSDB; ADA84594.
XX
PT   New PRO nucleic acid, useful for preparing a composition for treating
PT   e.g. tumor or for tissue typing.
XX
PS   Claim 2; Fig 221; 637pp; English.
XX
CC   The invention describes 305 nucleic acids encoding PRO (secreted and
CC   transmembrane) polypeptides (I). (I) is useful for stimulating the
CC   release of TNF-alpha from human blood, for modulating the uptake of
CC   glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC   stimulating the proliferation or differentiation of chondrocyte cells,
CC   for stimulating the proliferation of or gene expression in pericyte
CC   cells, for stimulating the release of proteoglycans from cartilage, for
CC   stimulating the proliferation of inner ear utricular supporting cells,
CC   for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC   the release of a cytokine from PBMC cells, for inhibiting the binding of
CC   A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC   cells, for stimulating proliferation of endothelial cells, for detecting
CC   the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC   prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC   are useful for isolating genomic and cDNA nucleotide sequences or
CC   antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC   in assays to identify other proteins or molecules involved in binding
CC   interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC   and gene mapping, in generation of antisense RNA and DNA, in the
CC   preparation of PRO polypeptide, for generating transgenic animals or
CC   knockout animals which in turn are useful in the development and
CC   screening of therapeutically useful reagents, in gene therapy, for
CC   chromosome identification, as chromosome marker, and for generating
CC   probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC   detecting its expression in specific cells, tissues or serum, and for
CC   affinity purification of PRO from recombinant cell culture or natural
CC   sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC   a novel human secreted and transmembrane PRO polypeptide.
XX
SQ   Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 21.4;  DB 1;  Length 1129;
  Best Local Similarity   66.0%;  Pred. No. 95;
  Matches   31;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy       2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
             || ||  ||||||  ||| ||| |  |   |||  |||||||  ||
Db       1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083


RESULT 179
ADB29849/c
ID   ADB29849 standard; cDNA; 1129 BP.
XX
AC   ADB29849;
XX
DT   20-NOV-2003  (first entry)
XX
DE   cDNA encoding human PRO polypeptide #111.
XX
KW   Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW   tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW   cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW   liver; microvascular endothelial cell; glucose; FFA;
KW   skeletal muscle cell; adipocyte cell; pericyte cell;
KW   inner ear utricular supporting cell; T-lymphocyte cell;
KW   endothelial cell tube formation; bone disorder; cartilage disorder;
KW   sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW   rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW   immune system cell infiltration.
XX
OS   Homo sapiens.
XX
PN   US2003073214-A1.
XX
PD   17-APR-2003.
XX
PF   17-APR-2002; 2002US-00124822.
XX
PR   31-MAR-1997;   97WO-US005230.
PR   12-JUN-1998;   98WO-US012456.
PR   14-JUL-1998;   98WO-US014552.
PR   28-AUG-1998;   98WO-US017888.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98WO-US019093.
PR   14-SEP-1998;   98WO-US019094.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98WO-US019437.
PR   07-OCT-1998;   98WO-US021141.
PR   29-OCT-1998;   98WO-US022991.
PR   29-OCT-1998;   98WO-US022992.
PR   20-NOV-1998;   98WO-US024855.
PR   01-DEC-1998;   98WO-US025108.
PR   05-JAN-1999;   99WO-US000106.
PR   08-MAR-1999;   99WO-US005028.
PR   10-MAR-1999;   99WO-US005190.
PR   20-APR-1999;   99WO-US008615.
PR   14-MAY-1999;   99WO-US010733.
PR   02-JUN-1999;   99WO-US012252.
PR   01-SEP-1999;   99WO-US020111.
PR   08-SEP-1999;   99WO-US020594.
PR   13-SEP-1999;   99WO-US020944.
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PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-720081/68.
DR P-PSDB; ADB29850.
XX
PT Novel secreted and transmembrane PRO polypeptides useful for stimulating
PT the release of tumor necrosis factor alpha and detecting the presence of
PT a tumor in a mammal.
XX
PS Claim 2; Fig 221; 638pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence encodes a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC the USPTO website at seqdata.uspto.gov.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 180
ADA80377/c
ID ADA80377 standard; cDNA; 1129 BP.
XX
AC ADA80377;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polynucleotide #111.
XX

KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003082761-A1.
XX
PD 01-MAY-2003.
XX
PF 12-APR-2002; 2002US-00121061.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755115/71.
DR P-PSDB; ADA80378.
XX
PT New PRO polypeptides useful for treating diabetes, hyper- or hypo-
PT insulinemia, sports injuries, arthritis, obesity, stroke, heart attack,
PT various coagulation disorders and tumors.
XX
PS Claim 2; Fig 221; 638pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in

CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 181
ADA75619/c
ID ADA75619 standard; cDNA; 1129 BP.
XX
AC ADA75619;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003082703-A1.
XX
PD 01-MAY-2003.
XX
PF 23-APR-2002; 2002US-00128691.
XX
PR 09-DEC-1999; 99US-0170262P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zharg Z;
XX
DR WPI; 2003-765414/72.
DR P-PSDB; ADA75620.
XX
PT New PRO nucleic acid, useful for preparing a composition for treating
PT e.g., tumor or for tissue typing.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 182
ADA46844/c
ID ADA46844 standard; cDNA; 1129 BP.
XX
AC ADA46844;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX

OS Homo sapiens.
XX
PN US2003073210-A1.
XX
PD 17-APR-2003.
XX
PF 11-APR-2002; 2002US-00121045.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-644800/61.
DR P-PSDB; ADA46845.
XX
PT New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 or
PT PRO4978, useful in molecular biology, chromosome and gene mapping, in
PT generating antisense RNA and DNA, and in gene therapy.
XX
PS Claim 2; Fig 221; 638pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating

CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 183
ADB25140/c
ID ADB25140 standard; cDNA; 1129 BP.
XX
AC ADB25140;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polynucleotide SEQ ID NO 221.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003077715-A1.
XX
PD 24-APR-2003.
XX
PF 23-APR-2002; 2002US-00128693.
XX
PR 31-AUG-1998; 98US-0098525P.
PR 16-SEP-1998; 98US-0100634P.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380137.
PR 30-MAR-2000; 2000WO-US008439.
PR 02-JUN-2000; 2000WO-US015264.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755070/71.
DR P-PSDB; ADB25141.
XX
PT New isolated, secreted and transmembrane PRO nucleic acids, useful for
PT the diagnosis, prevention and/or treatment of tumors, such as lung,
PT colon, breast, prostate, rectal, cervical and/or liver tumors.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 184
ADA93316/c
ID ADA93316 standard; cDNA; 1129 BP.
XX
AC ADA93316;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003077721-A1.
XX
PD 24-APR-2003.

XX
PF 24-APR-2002; 2002US-00131837.
XX
PR 09-DEC-1999; 99US-0170262P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755076/71.
DR P-PSDB; ADA93317.
XX
PT New PRO nucleic acid, useful for recombinantly producing a PRO
PT polypeptide and for manufacturing a medicament for diagnosing or treating
PT tumor.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 185
ADB26666/c
ID ADB26666 standard; cDNA; 1129 BP.
XX
AC ADB26666;
XX
DT 20-NOV-2003 (first entry)
XX
DE cDNA encoding human PRO polypeptide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003092147-A1.
XX
PD 15-MAY-2003.
XX
PF 11-APR-2002; 2002US-00121051.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.

PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-777249/73.
DR P-PSDB; ADB26667.
XX
PT Novel isolated PRO polypeptide useful for treating diabetes, hyper- or
PT hypo-insulinemia, sports injuries, arthritis, obesity, stroke, heart
PT attack, various coagulation disorders, tumors.
XX
PS Claim 2; Fig 221; 660pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence encodes a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC the USPTO website at seqdata.uspto.gov.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 186
ADB30953/c
ID ADB30953 standard; cDNA; 1129 BP.
XX
AC ADB30953;
XX
DT 20-NOV-2003 (first entry)
XX
DE cDNA encoding human PRO polypeptide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003096386-A1.
XX
PD 22-MAY-2003.
XX
PF 11-APR-2002; 2002US-00121042.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.

PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786990/74.
DR P-PSDB; ADB30954.
XX
PT Novel isolated PRO polypeptide useful for treating diabetes, hyper- or
PT hypo-insulinemia, sports injuries, arthritis, obesity, stroke, heart
PT attack, various coagulation disorders, tumors.
XX
PS Claim 2; Fig 221; 638pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence encodes a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC the USPTO website at seqdata.uspto.gov.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;

```
  Matches   31;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy       2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
              || ||  ||||||  ||| ||| |  |   |||  ||||||||  ||
Db       1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083


RESULT 187
ADA60881/c
ID   ADA60881 standard; cDNA; 1129 BP.
XX
AC   ADA60881;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Homo sapiens.
XX
KW   Human; secreted and transmembrane protein; PRO; gene; ss;
KW   Tumour necrosis factor alpha release; TNF-alpha release;
KW   glucose uptake modulator; FFA uptake modulator;
KW   cell proliferation stimulator; cell differentiation stimulator;
KW   cell differentiation inihibitor; cytokine release stimulator; tumour;
KW   lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW   cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW   gene therapy; chromosome identification; chromosome marker.
XX
OS   Novel.
OS   human.
OS   secreted.
OS   and.
OS   transmembrane.
OS   protein.
OS   PRO4327.
OS   cDNA.
XX
PN   US2003049817-A1.
XX
PD   13-MAR-2003.
XX
PF   10-MAY-2002; 2002US-00142423.
XX
PR   31-MAR-1997;   97WO-US005230.
PR   12-JUN-1998;   98WO-US012456.
PR   14-JUL-1998;   98WO-US014552.
PR   28-AUG-1998;   98WO-US017888.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98WO-US019093.
PR   14-SEP-1998;   98WO-US019094.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98WO-US019437.
PR   07-OCT-1998;   98WO-US021141.
PR   29-OCT-1998;   98WO-US022991.
PR   29-OCT-1998;   98WO-US022992.
PR   20-NOV-1998;   98WO-US024855.
PR   01-DEC-1998;   98WO-US025108.
PR   05-JAN-1999;   99WO-US000106.
PR   08-MAR-1999;   99WO-US005028.
PR   10-MAR-1999;   99WO-US005190.
PR   20-APR-1999;   99WO-US008615.
PR   14-MAY-1999;   99WO-US010733.
PR   02-JUN-1999;   99WO-US012252.
PR   01-SEP-1999;   99WO-US020111.
PR   08-SEP-1999;   99WO-US020594.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   30-NOV-1999;   99WO-US028409.
PR   01-DEC-1999;   99WO-US028301.
PR   01-DEC-1999;   99WO-US028634.
PR   02-DEC-1999;   99WO-US028551.
PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   20-DEC-1999;   99WO-US030999.
PR   22-DEC-1999;   99WO-US030720.
PR   30-DEC-1999;   99WO-US031243.
PR   30-DEC-1999;   99WO-US031274.
PR   05-JAN-2000; 2000WO-US000219.
PR   06-JAN-2000; 2000WO-US000277.
PR   06-JAN-2000; 2000WO-US000376.
PR   11-FEB-2000; 2000WO-US003565.
PR   18-FEB-2000; 2000WO-US004341.
PR   18-FEB-2000; 2000WO-US004342.
PR   22-FEB-2000; 2000WO-US004414.
PR   24-FEB-2000; 2000WO-US004914.
PR   24-FEB-2000; 2000WO-US005004.
PR   01-MAR-2000; 2000WO-US005601.
PR   02-MAR-2000; 2000WO-US005746.
PR   02-MAR-2000; 2000WO-US005841.
PR   15-MAR-2000; 2000WO-US006884.
PR   20-MAR-2000; 2000WO-US007377.
PR   21-MAR-2000; 2000WO-US007532.
PR   30-MAR-2000; 2000WO-US008439.
PR   17-MAY-2000; 2000WO-US013705.
PR   22-MAY-2000; 2000WO-US014042.
PR   30-MAY-2000; 2000WO-US014941.
PR   02-JUN-2000; 2000WO-US015264.
PR   28-JUL-2000; 2000WO-US020710.
PR   11-AUG-2000; 2000WO-US022031.
PR   23-AUG-2000; 2000WO-US023522.
PR   24-AUG-2000; 2000WO-US023328.
PR   08-NOV-2000; 2000WO-US030952.
PR   10-NOV-2000; 2000WO-US030873.
PR   01-DEC-2000; 2000WO-US032678.
PR   20-DEC-2000; 2000US-00747259.
PR   20-DEC-2000; 2000WO-US034956.
PR   28-FEB-2001; 2001US-00796498.
PR   28-FEB-2001; 2001WO-US006520.
PR   01-MAR-2001; 2001WO-US006666.
PR   09-MAR-2001; 2001US-00802706.
PR   14-MAR-2001; 2001US-00808689.
PR   22-MAR-2001; 2001US-00816744.
PR   05-APR-2001; 2001US-00828366.
PR   10-MAY-2001; 2001US-00854208.
PR   10-MAY-2001; 2001US-00854280.
PR   18-MAY-2001; 2001US-00860216.
PR   25-MAY-2001; 2001US-00866028.
PR   25-MAY-2001; 2001US-00866034.
PR   25-MAY-2001; 2001WO-US017092.
PR   01-JUN-2001; 2001US-00872035.
PR   01-JUN-2001; 2001WO-US017800.
PR   05-JUN-2001; 2001US-00874503.
PR   14-JUN-2001; 2001US-00882636.
PR   19-JUN-2001; 2001US-00886342.
PR   20-JUN-2001; 2001WO-US019692.
PR   21-JUN-2001; 2001US-00887879.
PR   22-JUN-2001; 2001WO-US020116.
PR   29-JUN-2001; 2001WO-US021066.
PR   09-JUL-2001; 2001WO-US021735.
PR   18-JUL-2001; 2001US-00908827.
PR   06-AUG-2001; 2001US-00924419.
PR   09-AUG-2001; 2001US-00927796.
PR   16-AUG-2001; 2001US-00931836.
PR   19-DEC-2001; 2001US-00028072.
PR   10-MAR-2009; 2000WO-US006319.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Baker KP,  Beresini M,  Deforge L,  Desnoyers L,  Filvaroff E,  Gao W;
PI   Gerritsen ME,  Goddard A,  Godowski PJ,  Gurney AL,  Sherwood S;
PI   Smith V,  Stewart TA,  Tumas D,  Watanabe CK,  Wood WI,  Zhang Z;
```

XX
DR WPI; 2003-695893/66.
DR P-PSDB; ADA60882.
XX
PT New secreted and transmembrane PRO polypeptide and nucleic acid, useful
PT for manufacturing a medicament for diagnosing or treating tumor.
XX
PS Claim 2; Fig 221; 658pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC a novel human secreted and transmembrane PRO polypeptide.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 188
ADB24028/c
ID ADB24028 standard; cDNA; 1129 BP.
XX
AC ADB24028;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polynucleotide SEQ ID NO 221.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003077714-A1.
XX
PD 24-APR-2003.
XX
PF 22-APR-2002; 2002US-00127901.
XX
PR 17-JUN-1998; 98US-0089599P.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380137.
PR 30-NOV-1999; 99WO-US028313.
PR 30-MAR-2000; 2000WO-US008439.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755069/71.
DR P-PSDB; ADB24029.
XX
PT New isolated, secreted and transmembrane PRO polypeptides and nucleic
PT acids, useful for the diagnosis, prevention and/or treatment of tumors,
PT such as lung, colon, breast, prostate, rectal, cervical and/or liver
PT tumors.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 189
ADA96357/c
ID ADA96357 standard; cDNA; 1129 BP.
XX
AC ADA96357;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003082690-A1.
XX
PD 01-MAY-2003.
XX
PF 22-APR-2002; 2002US-00127837.
XX
PR 01-SEP-1998; 98US-0098750P.
PR 01-SEP-1999; 99WO-US020111.
PR 18-OCT-1999; 99US-00403297.
PR 18-FEB-2000; 2000WO-US004342.
PR 08-NOV-2000; 2000WO-US030952.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755107/71.
DR P-PSDB; ADA96358.
XX
PT PRO nucleic acid, useful for preparing a composition for treating e.g.,
PT tumor or for tissue typing.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

```
Qy       2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
             || ||  ||||||  ||| ||| |  |   |||  |||||||  ||
Db       1129 TTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083
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RESULT 190
ADA80929/c
ID ADA80929 standard; cDNA; 1129 BP.
XX
AC ADA80929;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003082702-A1.
XX
PD 01-MAY-2003.
XX
PF 23-APR-2002; 2002US-00128690.
XX
PR 02-MAR-2000; 2000WO-US005841.
PR 30-MAY-2000; 2000WO-US014941.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755111/71.
DR P-PSDB; ADA80930.
XX
PT New PRO nucleic acid, useful for preparing a composition for treating
PT e.g., tumor or for tissue typing.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and

CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

```
Qy       2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
             || ||  ||||||  ||| ||| |  |   |||  ||||||||  ||
Db       1129 TTTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083
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RESULT 191
ADA95805/c
ID ADA95805 standard; cDNA; 1129 BP.
XX
AC ADA95805;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003082759-A1.
XX
PD 01-MAY-2003.
XX
PF 11-APR-2002; 2002US-00121040.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.

PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755114/71.
DR P-PSDB; ADA95806.
XX
PT New isolated PRO polypeptides, useful for treating diabetes, hyper- or
PT hypo-insulinemia, sports injuries, arthritis, obesity, stroke, heart
PT attack, various coagulation disorders and tumors.
XX
PS Claim 2; Fig 221; 638pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 192
ADB26114/c
ID ADB26114 standard; cDNA; 1129 BP.
XX
AC ADB26114;
XX
DT 20-NOV-2003 (first entry)
XX
DE cDNA encoding human PRO polypeptide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003082760-A1.
XX
PD 01-MAY-2003.
XX
PF 12-APR-2002; 2002US-00121056.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.

PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-777204/73.
DR P-PSDB; ADB26115.
XX
PT New secreted and transmembrane PRO polypeptides and nucleic acids, useful
PT in gene therapy, detecting the presence of tumor in a mammal, or
PT modulating the uptake of glucose or free fatty acid by skeletal muscle
PT cells or adipocyte cells.
XX
PS Claim 2; Fig 221; 659pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence encodes a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC the USPTO website at seqdata.uspto.gov.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 193
ADB21599/c
ID ADB21599 standard; cDNA; 1129 BP.
XX
AC ADB21599;
XX
DT 20-NOV-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; gene; ss;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inihibitor; cytokine release stimulator; tumour;

KW lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX
OS Homo sapiens.
XX
PN US2003082765-A1.
XX
PD 01-MAY-2003.
XX
PF 17-MAY-2002; 2002US-00147492.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786920/74.
DR P-PSDB; ADB21600.
XX
PT New secreted and transmembrane PRO polypeptide useful for detecting the
PT presence of tumor in a mammal, or modulating the uptake of glucose or
PT free fatty acid by skeletal muscle cells or adipocyte cells.
XX
PS Claim 2; Fig 221; 638pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the

CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC a novel human secreted and transmembrane PRO polypeptide.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
Db 1129 TTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 194
ADA77378/c
ID ADA77378 standard; cDNA; 1129 BP.
XX
AC ADA77378;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003068797-A1.
XX
PD 10-APR-2003.
XX
PF 07-MAY-2002; 2002US-00140921.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.

PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-625489/59.
DR P-PSDB; ADA77379.
XX
PT Novel isolated, secreted and transmembrane PRO polypeptides e.g. PRO1801
PT and PRO1114, useful in the preparation of a medicament for treating a
PT condition responsive to PRO polypeptide, and as therapeutic agents e.g.
PT vaccines.
XX
PS Claim 2; Fig 221; 659pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

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Qy       2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
             || ||  ||||||  ||| ||| |  |   |||  ||||||||  ||
Db       1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083
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RESULT 195
ADB18118/c
ID ADB18118 standard; cDNA; 1129 BP.
XX
AC ADB18118;
XX
DT 20-NOV-2003 (first entry)
XX
DE cDNA encoding human PRO polypeptide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003077710-A1.
XX
PD 24-APR-2003.
XX
PF 22-APR-2002; 2002US-00127825.
XX
PR 22-OCT-1998; 98US-0105169P.
PR 01-SEP-1999; 99WO-US020111.
PR 18-OCT-1999; 99US-00403297.
PR 30-NOV-1999; 99WO-US028313.
PR 18-FEB-2000; 2000WO-US004342.
PR 01-DEC-2000; 2000WO-US032678.
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PA (GETH) GENENTECH INC.
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PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755065/71.
DR P-PSDB; ADB18119.
XX
PT New secreted and transmembrane PRO polypeptides and nucleic acids, useful
PT in gene therapy, in chromosome and gene mapping, as chromosome markers,
PT in tissue typing, and in identifying chromosomes.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
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CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which

CC may benefit from enhanced local immune system cell infiltration. This
CC sequence encodes a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC the USPTO website at seqdata.uspto.gov.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 196
ADA86801/c
ID ADA86801 standard; cDNA; 1129 BP.
XX
AC ADA86801;
XX
DT 20-NOV-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; gene; ss;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inihibitor; cytokine release stimulator; tumour;
KW lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX
OS Homo sapiens.
XX
PN US2003082709-A1.
XX
PD 01-MAY-2003.
XX
PF 15-MAY-2002; 2002US-00146791.
XX
PR 17-AUG-1998; 98US-0096895P.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380137.
PR 30-MAR-2000; 2000WO-US008439.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786912/74.
DR P-PSDB; ADA86802.
XX
PT New PRO nucleic acid, useful for preparing a recombinant PRO polypeptide,
PT for preparing a composition for treating e.g., tumor, or for tissue
PT typing.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC a novel human secreted and transmembrane PRO polypeptide.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 197
ADA87904/c
ID ADA87904 standard; cDNA; 1129 BP.
XX
AC ADA87904;
XX
DT 20-NOV-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; gene; ss;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inihibitor; cytokine release stimulator; tumour;
KW lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX
OS Homo sapiens.
XX
PN US2003082700-A1.
XX
PD 01-MAY-2003.
XX
PF 23-APR-2002; 2002US-00128684.
XX
PR 05-JUN-2000; 2000US-0209832P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786910/74.
DR P-PSDB; ADA87905.
XX
PT New PRO nucleic acid, useful for preparing a composition for treating

PT e.g., tumor or for tissue typing.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC a novel human secreted and transmembrane PRO polypeptide.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 198
ADA46292/c
ID ADA46292 standard; cDNA; 1129 BP.
XX
AC ADA46292;
XX
DT 20-NOV-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; gene; ss;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inihibitor; cytokine release stimulator; tumour;
KW lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX
OS Homo sapiens.
XX
PN US2003054516-A1.
XX
PD 20-MAR-2003.
XX
PF 12-APR-2002; 2002US-00121050.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.

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PR   14-MAR-2001; 2001US-00808689.
PR   22-MAR-2001; 2001US-00816744.
PR   05-APR-2001; 2001US-00828366.
PR   10-MAY-2001; 2001US-00854208.
PR   10-MAY-2001; 2001US-00854280.
PR   18-MAY-2001; 2001US-00860216.
PR   25-MAY-2001; 2001US-00866028.
PR   25-MAY-2001; 2001US-00866034.
PR   25-MAY-2001; 2001WO-US017092.
PR   01-JUN-2001; 2001US-00872035.
PR   01-JUN-2001; 2001WO-US017800.
PR   05-JUN-2001; 2001US-00874503.
PR   14-JUN-2001; 2001US-00882636.
PR   19-JUN-2001; 2001US-00886342.
PR   20-JUN-2001; 2001WO-US019692.
PR   21-JUN-2001; 2001US-00887879.
PR   22-JUN-2001; 2001WO-US020116.
PR   29-JUN-2001; 2001WO-US021066.
PR   09-JUL-2001; 2001WO-US021735.
PR   18-JUL-2001; 2001US-00908827.
PR   06-AUG-2001; 2001US-00924419.
PR   09-AUG-2001; 2001US-00927796.
PR   16-AUG-2001; 2001US-00931836.
PR   19-DEC-2001; 2001US-00028072.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI   Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI   Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR   WPI; 2003-521853/49.
DR   P-PSDB; ADA46293.
XX
PT   New PRO nucleic acid, useful for preparing a composition for treating
PT   e.g., tumor.
XX
PS   Claim 2; Fig 221; 200pp; English.
XX
CC   The invention describes 305 nucleic acids encoding PRO (secreted and
CC   transmembrane) polypeptides (I). (I) is useful for stimulating the
CC   release of TNF-alpha from human blood, for modulating the uptake of
CC   glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC   stimulating the proliferation or differentiation of chondrocyte cells,
CC   for stimulating the proliferation of or gene expression in pericyte
CC   cells, for stimulating the release of proteoglycans from cartilage, for
CC   stimulating the proliferation of inner ear utricular supporting cells,
CC   for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC   the release of a cytokine from PBMC cells, for inhibiting the binding of
CC   A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC   cells, for stimulating proliferation of endothelial cells, for detecting
CC   the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC   prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC   are useful for isolating genomic and cDNA nucleotide sequences or
CC   antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC   in assays to identify other proteins or molecules involved in binding
CC   interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC   and gene mapping, in generation of antisense RNA and DNA, in the
CC   preparation of PRO polypeptide, for generating transgenic animals or
CC   knockout animals which in turn are useful in the development and
CC   screening of therapeutically useful reagents, in gene therapy, for
CC   chromosome identification, as chromosome marker, and for generating
CC   probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC   detecting its expression in specific cells, tissues or serum, and for
CC   affinity purification of PRO from recombinant cell culture or natural
CC   sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC   a novel human secreted and transmembrane PRO polypeptide.
XX
SQ   Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 21.4;  DB 1;  Length 1129;
  Best Local Similarity   66.0%;  Pred. No. 95;
  Matches   31;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy       2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
             || ||  ||||||  ||| ||| |  |  |||  |||||||  ||
Db       1129 TTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083


RESULT 199
ADB28322/c
ID   ADB28322 standard; cDNA; 1129 BP.
XX
AC   ADB28322;
XX
DT   20-NOV-2003  (first entry)
XX
DE   cDNA encoding human PRO polypeptide #111.
XX
KW   Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW   tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW   cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW   liver; microvascular endothelial cell; glucose; FFA;
KW   skeletal muscle cell; adipocyte cell; pericyte cell;
KW   inner ear utricular supporting cell; T-lymphocyte cell;
KW   endothelial cell tube formation; bone disorder; cartilage disorder;
KW   sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW   rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW   immune system cell infiltration.
XX
OS   Homo sapiens.
XX
PN   US2003082699-A1.
XX
PD   01-MAY-2003.
XX
PF   22-APR-2002; 2002US-00127851.
XX
PR   17-JUN-1998;   98US-0089599P.
PR   02-JUN-1999;   99WO-US012252.
PR   25-AUG-1999;   99US-00380137.
PR   30-NOV-1999;   99WO-US028313.
PR   30-MAR-2000; 2000WO-US008439.
PR   01-DEC-2000; 2000WO-US032678.
PR   19-DEC-2001; 2001US-00028072.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI   Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI   Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR   WPI; 2003-777202/73.
DR   P-PSDB; ADB28323.
XX
PT   New PRO nucleic acid, useful for preparing a composition for treating
PT   e.g., tumor or for tissue typing.
XX
PS   Claim 2; Fig 221; 637pp; English.
XX
CC   The invention relates to isolated human PRO polypeptides (secreted and
CC   transmembrane polypeptides) and the polynucleotides encoding them. The
CC   invention also relates to an antibody which specifically binds to a PRO
CC   polypeptide, a method for stimulating the release of tumour necrosis
CC   factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC   proliferation or differentiation of chondrocyte cells and a method for
CC   detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC   colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC   polynucleotides are useful in molecular biology, including uses as
CC   hybridisation probes, in chromosome and gene mapping, in generating
CC   antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC   be used in preparing PRO polypeptides by recombinant techniques and in
CC   generating either transgenic animals or knock-out animals which are
CC   useful in the development and screening of therapeutically useful
CC   reagents. The PRO polypeptides or antibodies are used in preparing a
CC   medicament for treating a condition responsive to the polypeptides or
```

CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence encodes a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC the USPTO website at seqdata.uspto.gov.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 200
ADB28874/c
ID ADB28874 standard; cDNA; 1129 BP.
XX
AC ADB28874;
XX
DT 20-NOV-2003 (first entry)
XX
DE cDNA encoding human PRO polypeptide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003082706-A1.
XX
PD 01-MAY-2003.
XX
PF 24-APR-2002; 2002US-00131836.
XX
PR 09-DEC-1999; 99US-0170262P.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforgre L, Desnoyers L, Filvaroff E;
PI Gao W, Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-777203/73.
DR P-PSDB; ADB28875.
XX
PT New PRO nucleic acid, useful for preparing a composition for treating
PT e.g., tumor or for tissue typing.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence encodes a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC the USPTO website at seqdata.uspto.gov.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 201
ADA76826/c
ID ADA76826 standard; cDNA; 1129 BP.
XX
AC ADA76826;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003059909-A1.

XX
PD 27-MAR-2003.
XX
PF 10-MAY-2002; 2002US-00143032.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-540684/51.
DR P-PSDB; ADA76827.
XX
PT New secreted and transmembrane nucleic acids and polypeptides, designated
PT as PRO, useful for treating inflammation, organ failure, atherosclerosis,
PT cardiac injury, infertility, birth defects, premature aging, AIDS, or
PT cancer.
XX
PS Claim 2; Fig 221; 660pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans

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CC   from cartilage are useful for treating sports-related joint problems,
CC   articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC   polypeptides are also useful for treating various mammalian haemoglobin-
CC   associated disorders such as various thalassaemias and conditions which
CC   may benefit from enhanced local immune system cell infiltration. This
CC   sequence represents a human PRO polynucleotide of the invention. Note:
CC   The sequence data for this patent is also available in electronic format
CC   from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ   Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 21.4;  DB 1;  Length 1129;
  Best Local Similarity   66.0%;  Pred. No. 95;
  Matches   31;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy       2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
             || ||  ||||||  ||| ||| |  |   |||  ||||||||  ||
Db       1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083


RESULT 202
ADA88456/c
ID   ADA88456 standard; cDNA; 1129 BP.
XX
AC   ADA88456;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW   Human; secreted and transmembrane protein; PRO; gene; ss;
KW   Tumour necrosis factor alpha release; TNF-alpha release;
KW   glucose uptake modulator; FFA uptake modulator;
KW   cell proliferation stimulator; cell differentiation stimulator;
KW   cell differentiation inihibitor; cytokine release stimulator; tumour;
KW   lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW   cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW   gene therapy; chromosome identification; chromosome marker.
XX
OS   Homo sapiens.
XX
PN   US2003073213-A1.
XX
PD   17-APR-2003.
XX
PF   17-APR-2002; 2002US-00124819.
XX
PR   31-MAR-1997;   97WO-US005230.
PR   12-JUN-1998;   98WO-US012456.
PR   14-JUL-1998;   98WO-US014552.
PR   28-AUG-1998;   98WO-US017888.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98WO-US019093.
PR   14-SEP-1998;   98WO-US019094.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98WO-US019437.
PR   07-OCT-1998;   98WO-US021141.
PR   29-OCT-1998;   98WO-US022991.
PR   29-OCT-1998;   98WO-US022992.
PR   20-NOV-1998;   98WO-US024855.
PR   01-DEC-1998;   98WO-US025108.
PR   05-JAN-1999;   99WO-US000106.
PR   08-MAR-1999;   99WO-US005028.
PR   10-MAR-1999;   99WO-US005190.
PR   20-APR-1999;   99WO-US008615.
PR   14-MAY-1999;   99WO-US010733.
PR   02-JUN-1999;   99WO-US012252.
PR   01-SEP-1999;   99WO-US020111.
PR   08-SEP-1999;   99WO-US020594.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   30-NOV-1999;   99WO-US028409.
PR   01-DEC-1999;   99WO-US028301.
PR   01-DEC-1999;   99WO-US028634.
PR   02-DEC-1999;   99WO-US028551.
PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   20-DEC-1999;   99WO-US030999.
PR   22-DEC-1999;   99WO-US030720.
PR   30-DEC-1999;   99WO-US031243.
PR   30-DEC-1999;   99WO-US031274.
PR   05-JAN-2000; 2000WO-US000219.
PR   06-JAN-2000; 2000WO-US000277.
PR   06-JAN-2000; 2000WO-US000376.
PR   11-FEB-2000; 2000WO-US003565.
PR   18-FEB-2000; 2000WO-US004341.
PR   18-FEB-2000; 2000WO-US004342.
PR   22-FEB-2000; 2000WO-US004414.
PR   24-FEB-2000; 2000WO-US004914.
PR   24-FEB-2000; 2000WO-US005004.
PR   01-MAR-2000; 2000WO-US005601.
PR   02-MAR-2000; 2000WO-US005746.
PR   02-MAR-2000; 2000WO-US005841.
PR   10-MAR-2000; 2000WO-US006319.
PR   15-MAR-2000; 2000WO-US006884.
PR   20-MAR-2000; 2000WO-US007377.
PR   21-MAR-2000; 2000WO-US007532.
PR   30-MAR-2000; 2000WO-US008439.
PR   17-MAY-2000; 2000WO-US013705.
PR   22-MAY-2000; 2000WO-US014042.
PR   30-MAY-2000; 2000WO-US014941.
PR   02-JUN-2000; 2000WO-US015264.
PR   28-JUL-2000; 2000WO-US020710.
PR   11-AUG-2000; 2000WO-US022031.
PR   23-AUG-2000; 2000WO-US023522.
PR   24-AUG-2000; 2000WO-US023328.
PR   08-NOV-2000; 2000WO-US030952.
PR   10-NOV-2000; 2000WO-US030873.
PR   01-DEC-2000; 2000WO-US032678.
PR   20-DEC-2000; 2000US-00747259.
PR   20-DEC-2000; 2000WO-US034956.
PR   28-FEB-2001; 2001US-00796498.
PR   28-FEB-2001; 2001WO-US006520.
PR   01-MAR-2001; 2001WO-US006666.
PR   09-MAR-2001; 2001US-00802706.
PR   14-MAR-2001; 2001US-00808689.
PR   22-MAR-2001; 2001US-00816744.
PR   05-APR-2001; 2001US-00828366.
PR   10-MAY-2001; 2001US-00854208.
PR   10-MAY-2001; 2001US-00854280.
PR   18-MAY-2001; 2001US-00860216.
PR   25-MAY-2001; 2001US-00866028.
PR   25-MAY-2001; 2001US-00866034.
PR   25-MAY-2001; 2001WO-US017092.
PR   01-JUN-2001; 2001US-00872035.
PR   01-JUN-2001; 2001WO-US017800.
PR   05-JUN-2001; 2001US-00874503.
PR   14-JUN-2001; 2001US-00882636.
PR   19-JUN-2001; 2001US-00886342.
PR   20-JUN-2001; 2001WO-US019692.
PR   21-JUN-2001; 2001US-00887879.
PR   22-JUN-2001; 2001WO-US020116.
PR   29-JUN-2001; 2001WO-US021066.
PR   09-JUL-2001; 2001WO-US021735.
PR   18-JUL-2001; 2001US-00908827.
PR   06-AUG-2001; 2001US-00924419.
PR   09-AUG-2001; 2001US-00927796.
PR   16-AUG-2001; 2001US-00931836.
PR   19-DEC-2001; 2001US-00028072.
```

XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-743816/70.
DR P-PSDB; ADA88457.
XX
PT New secreted and transmembrane PRO polypeptides and nucleic acids, useful
PT in gene therapy, detecting the presence of tumor in a mammal, or
PT modulating the uptake of glucose or free fatty acid by skeletal muscle
PT cells or adipocyte cells.
XX
PS Claim 2; Fig 221; 659pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC a novel human secreted and transmembrane PRO polypeptide.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 203
ADA97461/c
ID ADA97461 standard; cDNA; 1129 BP.
XX
AC ADA97461;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003082686-A1.
XX
PD 01-MAY-2003.
XX
PF 19-APR-2002; 2002US-00125926.
XX
PR 05-JUN-2000; 2000US-0209832P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755106/71.
DR P-PSDB; ADA97462.
XX
PT Isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 or
PT PRO4978, useful in molecular biology, chromosome and gene mapping, in
PT generating antisense RNA and DNA, and in gene therapy.
XX
PS Claim 2; Fig 221; 666pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423

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Db       1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083


RESULT 204
ADB27218/c
ID   ADB27218 standard; cDNA; 1129 BP.
XX
AC   ADB27218;
XX
DT   20-NOV-2003  (first entry)
XX
DE   cDNA encoding human PRO polypeptide #111.
XX
KW   Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW   tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW   cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW   liver; microvascular endothelial cell; glucose; FFA;
KW   skeletal muscle cell; adipocyte cell; pericyte cell;
KW   inner ear utricular supporting cell; T-lymphocyte cell;
KW   endothelial cell tube formation; bone disorder; cartilage disorder;
KW   sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW   rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW   immune system cell infiltration.
XX
OS   Homo sapiens.
XX
PN   US2003022239-A1.
XX
PD   30-JAN-2003.
XX
PF   12-APR-2002; 2002US-00121049.
XX
PR   18-JUN-1997;   97US-0049911P.
PR   26-AUG-1997;   97US-0056974P.
PR   17-SEP-1997;   97US-0059113P.
PR   17-SEP-1997;   97US-0059115P.
PR   17-SEP-1997;   97US-0059117P.
PR   17-SEP-1997;   97US-0059122P.
PR   17-SEP-1997;   97US-0059184P.
PR   18-SEP-1997;   97US-0059263P.
PR   19-SEP-1997;   97US-0059352P.
PR   19-SEP-1997;   97US-0059588P.
PR   24-SEP-1997;   97US-0059836P.
PR   17-OCT-1997;   97US-0062250P.
PR   17-OCT-1997;   97US-0062285P.
PR   17-OCT-1997;   97US-0062287P.
PR   17-OCT-1997;   97US-0063755P.
PR   24-OCT-1997;   97US-0062814P.
PR   24-OCT-1997;   97US-0062816P.
PR   24-OCT-1997;   97US-0063045P.
PR   24-OCT-1997;   97US-0063082P.
PR   24-OCT-1997;   97US-0063127P.
PR   27-OCT-1997;   97US-0063327P.
PR   27-OCT-1997;   97US-0063329P.
PR   28-OCT-1997;   97US-0063550P.
PR   28-OCT-1997;   97US-0063561P.
PR   29-OCT-1997;   97US-0063704P.
PR   29-OCT-1997;   97US-0063733P.
PR   29-OCT-1997;   97US-0063735P.
PR   29-OCT-1997;   97US-0063738P.
PR   03-NOV-1997;   97US-0064248P.
PR   07-NOV-1997;   97US-0064809P.
PR   12-NOV-1997;   97US-0065186P.
PR   17-NOV-1997;   97US-0065846P.
PR   21-NOV-1997;   97US-0066364P.
PR   24-NOV-1997;   97US-0066453P.
PR   24-NOV-1997;   97US-0066511P.
PR   24-NOV-1997;   97US-0066770P.
PR   11-DEC-1997;   97US-0069212P.
PR   11-DEC-1997;   97US-0069278P.
PR   11-DEC-1997;   97US-0069334P.
PR   16-DEC-1997;   97US-0069694P.
PR   23-JAN-1998;   98US-0072320P.
PR   04-FEB-1998;   98US-0073612P.
PR   09-FEB-1998;   98US-0074086P.
PR   09-FEB-1998;   98US-0074092P.
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KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inihibitor; cytokine release stimulator; tumour;
KW lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
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XX
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PD 08-MAY-2003.
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DT 20-NOV-2003 (first entry)
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KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
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XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
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XX
PT Novel secreted and transmembrane PRO polypeptides useful for stimulating
PT release of tumor necrosis factor-alpha from human blood and detecting the
PT presence of a tumor in a mammal.
XX
PS Claim 2; Fig 221; 660pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in

CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 207
ADB22703/c
ID ADB22703 standard; cDNA; 1129 BP.
XX
AC ADB22703;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003077711-A1.
XX
PD 24-APR-2003.
XX
PF 22-APR-2002; 2002US-00127829.
XX
PR 22-OCT-1998; 98US-0105169P.
PR 01-SEP-1999; 99WO-US020111.
PR 18-OCT-1999; 99US-00403297.
PR 30-NOV-1999; 99WO-US028313.
PR 18-FEB-2000; 2000WO-US004342.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755066/71.
DR P-PSDB; ADB22704.
XX
PT New secreted and transmembrane PRO polypeptides and nucleic acids, useful
PT in gene therapy, as diagnostic markers for the presence of a disease
PT condition, or as therapeutic targets for treating tumors, diabetes,
PT obesity or arthritis.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 208
ADB23476/c
ID ADB23476 standard; cDNA; 1129 BP.
XX
AC ADB23476;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polynucleotide SEQ ID NO 221.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;

KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003077712-A1.
XX
PD 24-APR-2003.
XX
PF 22-APR-2002; 2002US-00127835.
XX
PR 20-OCT-1998; 98US-0104987P.
PR 01-SEP-1999; 99WO-US020111.
PR 18-OCT-1999; 99US-00403297.
PR 18-FEB-2000; 2000WO-US004342.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755067/71.
DR P-PSDB; ADB23477.
XX
PT New isolated, secreted and transmembrane PRO nucleic acid, useful for the
PT diagnosis, prevention and/or treatment of tumors, such as lung, colon,
PT breast, prostate, rectal, cervical and/or liver tumors.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 209
ADA92198/c
ID ADA92198 standard; cDNA; 1129 BP.
XX
AC ADA92198;
XX
DT 20-NOV-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; gene; ss;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inihibitor; cytokine release stimulator; tumour;
KW lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX
OS Homo sapiens.
XX
PN US2003082712-A1.
XX
PD 01-MAY-2003.
XX
PF 16-MAY-2002; 2002US-00147512.
XX
PR 15-MAY-1998; 98US-0085697P.
PR 08-MAR-1999; 99WO-US005028.
PR 25-AUG-1999; 99US-00380138.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786915/74.
DR P-PSDB; ADA92199.
XX
PT New PRO nucleic acid, useful for preparing a composition for treating
PT e.g., tumor or for tissue typing.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome

CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC a novel human secreted and transmembrane PRO polypeptide.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 210
ADB15261/c
ID ADB15261 standard; cDNA; 1129 BP.
XX
AC ADB15261;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003087352-A1.
XX
PD 08-MAY-2003.
XX
PF 22-APR-2002; 2002US-00127824.
XX
PR 17-AUG-1998; 98US-0096891P.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380137.
PR 30-MAR-2000; 2000WO-US008439.
PR 30-MAY-2000; 2000WO-US014941.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786943/74.
DR P-PSDB; ADB15262.
XX
PT New PRO nucleic acid, useful for producing a recombiannt PRO polypeptide
PT and for manufacturing a medicament for diagnosing or treating tumor.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 211
ADB38513/c
ID ADB38513 standard; cDNA; 1129 BP.
XX
AC ADB38513;
XX
DT 04-DEC-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; gene; ss;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inihibitor; cytokine release stimulator; tumour;
KW lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX
OS Homo sapiens.
XX
PN US2003082766-A1.
XX
PD 01-MAY-2003.
XX
PF 30-MAY-2002; 2002US-00158782.
XX
PR 31-MAR-1997; 97WO-US005230.

PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786921/74.
DR P-PSDB; ADB38514.
XX
PT New secreted and transmembrane PRO polypeptides and nucleic acids, useful
PT in gene therapy, detecting the presence of tumor in a mammal, or
PT modulating the uptake of glucose or free fatty acid by skeletal muscle
PT cells or adipocyte cells.
XX
PS Claim 2; Fig 221; 660pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC a novel human secreted and transmembrane PRO polypeptide.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

```
Qy       2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
             || ||  ||||||  ||| ||| |  |   |||  ||||||||  ||
Db       1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083
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RESULT 212
ADB37961/c
ID ADB37961 standard; cDNA; 1129 BP.
XX
AC ADB37961;
XX
DT 04-DEC-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; gene; ss;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inihibitor; cytokine release stimulator; tumour;
KW lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX
OS Homo sapiens.
XX
PN US2003087347-A1.
XX
PD 08-MAY-2003.
XX
PF 19-APR-2002; 2002US-00125921.
XX
PR 17-AUG-1998; 98US-0096791P.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380137.
PR 30-MAR-2000; 2000WO-US008439.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786938/74.
DR P-PSDB; ADB37962.
XX
PT New PRO nucleic acid, useful for preparing a recombinant PRO polypeptide
PT and for manufacturing a medicament for diagnosing or treating tumor.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC a novel human secreted and transmembrane PRO polypeptide.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

```
Qy       2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
             || ||  ||||||  ||| ||| |  |   |||  ||||||||  ||
Db       1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083
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RESULT 213
ADB66433/c
ID ADB66433 standard; cDNA; 1129 BP.
XX
AC ADB66433;
XX
DT 04-DEC-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; gene; ss;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inihibitor; cytokine release stimulator; tumour;
KW lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX
OS Homo sapiens.
XX
PN US2003082689-A1.
XX
PD 01-MAY-2003.
XX
PF 22-APR-2002; 2002US-00127831.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.

PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC..
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786905/74.
DR P-PSDB; ADB66434.
XX
PT New PRO nucleic acid, useful for preparing a composition for treating
PT e.g. tumor or for tissue typing.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC a novel human secreted and transmembrane PRO polypeptide.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 214
ADB89513/c
ID ADB89513 standard; cDNA; 1129 BP.
XX
AC ADB89513;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;

KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003082698-A1.
XX
PD 01-MAY-2003.
XX
PF 22-APR-2002; 2002US-00127850.
XX
PR 20-AUG-1998; 98US-0097218P.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380137.
PR 02-MAR-2000; 2000WO-US005841.
PR 30-MAR-2000; 2000WO-US008439.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-743896/70.
DR P-PSDB; ADB89514.
XX
PT New PRO nucleic acids and encoded polypeptides, useful in the treatment
PT of cancer.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 215
ADB90245/c
ID ADB90245 standard; cDNA; 1129 BP.
XX
AC ADB90245;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003082762-A1.
XX
PD 01-MAY-2003.
XX
PF 15-APR-2002; 2002US-00123235.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.

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PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   20-DEC-1999;   99WO-US030999.
PR   22-DEC-1999;   99WO-US030720.
PR   30-DEC-1999;   99WO-US031243.
PR   30-DEC-1999;   99WO-US031274.
PR   05-JAN-2000; 2000WO-US000219.
PR   06-JAN-2000; 2000WO-US000277.
PR   06-JAN-2000; 2000WO-US000376.
PR   11-FEB-2000; 2000WO-US003565.
PR   18-FEB-2000; 2000WO-US004341.
PR   18-FEB-2000; 2000WO-US004342.
PR   22-FEB-2000; 2000WO-US004414.
PR   24-FEB-2000; 2000WO-US004914.
PR   24-FEB-2000; 2000WO-US005004.
PR   01-MAR-2000; 2000WO-US005601.
PR   02-MAR-2000; 2000WO-US005746.
PR   02-MAR-2000; 2000WO-US005841.
PR   10-MAR-2000; 2000WO-US006319.
PR   15-MAR-2000; 2000WO-US006884.
PR   20-MAR-2000; 2000WO-US007377.
PR   21-MAR-2000; 2000WO-US007532.
PR   30-MAR-2000; 2000WO-US008439.
PR   17-MAY-2000; 2000WO-US013705.
PR   22-MAY-2000; 2000WO-US014042.
PR   30-MAY-2000; 2000WO-US014941.
PR   02-JUN-2000; 2000WO-US015264.
PR   28-JUL-2000; 2000WO-US020710.
PR   11-AUG-2000; 2000WO-US022031.
PR   23-AUG-2000; 2000WO-US023522.
PR   24-AUG-2000; 2000WO-US023328.
PR   08-NOV-2000; 2000WO-US030952.
PR   10-NOV-2000; 2000WO-US030873.
PR   01-DEC-2000; 2000WO-US032678.
PR   20-DEC-2000; 2000US-00747259.
PR   20-DEC-2000; 2000WO-US034956.
PR   28-FEB-2001; 2001US-00796498.
PR   28-FEB-2001; 2001WO-US006520.
PR   01-MAR-2001; 2001WO-US006666.
PR   09-MAR-2001; 2001US-00802706.
PR   14-MAR-2001; 2001US-00808689.
PR   22-MAR-2001; 2001US-00816744.
PR   05-APR-2001; 2001US-00828366.
PR   10-MAY-2001; 2001US-00854208.
PR   10-MAY-2001; 2001US-00854280.
PR   18-MAY-2001; 2001US-00860216.
PR   25-MAY-2001; 2001US-00866028.
PR   25-MAY-2001; 2001US-00866034.
PR   25-MAY-2001; 2001WO-US017092.
PR   01-JUN-2001; 2001US-00872035.
PR   01-JUN-2001; 2001WO-US017800.
PR   05-JUN-2001; 2001US-00874503.
PR   14-JUN-2001; 2001US-00882636.
PR   19-JUN-2001; 2001US-00886342.
PR   20-JUN-2001; 2001WO-US019692.
PR   21-JUN-2001; 2001US-00887879.
PR   22-JUN-2001; 2001WO-US020116.
PR   29-JUN-2001; 2001WO-US021066.
PR   09-JUL-2001; 2001WO-US021735.
PR   18-JUL-2001; 2001US-00908827.
PR   06-AUG-2001; 2001US-00924419.
PR   09-AUG-2001; 2001US-00927796.
PR   16-AUG-2001; 2001US-00931836.
PR   19-DEC-2001; 2001US-00028072.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI   Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI   Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR   WPI; 2003-743899/70.
DR   P-PSDB; ADB90246.
XX
PT   New secreted and transmembrane PRO polypeptides and nucleic acids, useful
PT   in gene therapy, and in the detection and treatment of tumor in a mammal.
XX
PS   Claim 2; Fig 221; 649pp; English.
XX
CC   The invention relates to isolated human PRO polypeptides (secreted and
CC   transmembrane polypeptides) and the polynucleotides encoding them. The
CC   invention also relates to an antibody which specifically binds to a PRO
CC   polypeptide, a method for stimulating the release of tumour necrosis
CC   factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC   proliferation or differentiation of chondrocyte cells and a method for
CC   detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC   colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC   polynucleotides are useful in molecular biology, including uses as
CC   hybridisation probes, in chromosome and gene mapping, in generating
CC   antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC   be used in preparing PRO polypeptides by recombinant techniques and in
CC   generating either transgenic animals or knock-out animals which are
CC   useful in the development and screening of therapeutically useful
CC   reagents. The PRO polypeptides or antibodies are used in preparing a
CC   medicament for treating a condition responsive to the polypeptides or
CC   antibodies, such as tumours, for stimulating and inhibiting proliferation
CC   of human microvascular endothelial cells, for modulating the uptake of
CC   glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC   stimulating differentiation of adipocyte cells, for stimulating
CC   proliferation of or gene expression in pericyte cells, for stimulating
CC   the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC   cells, for inducing endothelial cell tube formation and for treating
CC   various bone and/or cartilage disorders such as sports injuries and
CC   arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC   from cartilage are useful for treating sports-related joint problems,
CC   articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC   polypeptides are also useful for treating various mammalian haemoglobin-
CC   associated disorders such as various thalassaemias and conditions which
CC   may benefit from enhanced local immune system cell infiltration. This
CC   sequence represents a human PRO polynucleotide of the invention. Note:
CC   The sequence data for this patent is also available in electronic format
CC   from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ   Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 21.4;  DB 1;  Length 1129;
  Best Local Similarity   66.0%;  Pred. No. 95;
  Matches   31;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy       2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
                 ||  ||  ||||||  |||  |||  |  |   |||  ||||||||  ||
Db       1129 TTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083


RESULT 216
ADB39346/c
ID   ADB39346 standard; cDNA; 1129 BP.
XX
AC   ADB39346;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW   Human; secreted and transmembrane protein; PRO; gene; ss;
KW   Tumour necrosis factor alpha release; TNF-alpha release;
KW   glucose uptake modulator; FFA uptake modulator;
KW   cell proliferation stimulator; cell differentiation stimulator;
KW   cell differentiation inihibitor; cytokine release stimulator; tumour;
KW   lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW   cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW   gene therapy; chromosome identification; chromosome marker.
XX
OS   Homo sapiens.
XX
PN   US2003082764-A1.
```

XX
PD 01-MAY-2003.
XX
PF 03-MAY-2002; 2002US-00137868.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786919/74.
DR P-PSDB; ADB39347.
XX
PT New secreted and transmembrane PRO polypeptide useful for detecting the
PT presence of tumor in a mammal, or modulating the uptake of glucose or
PT free fatty acid by skeletal muscle cells or adipocyte cells.
XX
PS Claim 2; Fig 221; 659pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural

CC sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC a novel human secreted and transmembrane PRO polypeptide.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 217
ADB46969/c
ID ADB46969 standard; cDNA; 1129 BP.
XX
AC ADB46969;
XX
DT 04-DEC-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; gene; ss;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inihibitor; cytokine release stimulator; tumour;
KW lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX
OS Homo sapiens.
XX
PN US2003082687-A1.
XX
PD 01-MAY-2003.
XX
PF 19-APR-2002; 2002US-00125930.
XX
PR 05-JUN-2000; 2000US-0209832P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786904/74.
DR P-PSDB; ADB46970.
XX
PT New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 or
PT PRO4978, useful in molecular biology, chromosome and gene mapping, in
PT generating antisense RNA and DNA, and in gene therapy.
XX
PS Claim 2; Fig 221; 627pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC a novel human secreted and transmembrane PRO polypeptide.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 218
ADB86576/c
ID ADB86576 standard; cDNA; 1129 BP.
XX
AC ADB86576;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003082697-A1.
XX
PD 01-MAY-2003.
XX
PF 22-APR-2002; 2002US-00127849.
XX
PR 20-OCT-1998; 98US-0104987P.
PR 01-SEP-1999; 99WO-US020111.
PR 18-OCT-1999; 99US-00403297.
PR 18-FEB-2000; 2000WO-US004342.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-743895/70.
DR P-PSDB; ADB86577.
XX
PT New secreted and transmembrane PRO polypeptides, useful in the diagnosis

PT and treatment of cancer.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 219
ADB77181/c
ID ADB77181 standard; cDNA; 1129 BP.
XX
AC ADB77181;
XX
DT 04-DEC-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; gene; ss;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inihibitor; cytokine release stimulator; tumour;
KW lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX
OS Homo sapiens.
XX
PN US2003082696-A1.
XX
PD 01-MAY-2003.
XX
PF 22-APR-2002; 2002US-00127848.
XX
PR 03-NOV-1998; 98US-0106934P.
PR 26-JUL-1999; 99US-0145698P.
PR 01-SEP-1999; 99WO-US020111.
PR 18-OCT-1999; 99US-00403297.
PR 05-JAN-2000; 2000WO-US000219.
PR 18-FEB-2000; 2000WO-US004342.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755109/71.
DR P-PSDB; ADB77182.
XX
PT PRO nucleic acid, useful for preparing a composition for treating e.g.,
PT tumor or for tissue typing.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC a novel human secreted and transmembrane PRO polypeptide.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 220
ADB34338/c
ID ADB34338 standard; cDNA; 1129 BP.
XX
AC ADB34338;
XX
DT 04-DEC-2003 (first entry)

XX
DE Human PRO polynucleotide SEQ ID NO 221.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003077717-A1.
XX
PD 24-APR-2003.
XX
PF 24-APR-2002; 2002US-00131818.
XX
PR 07-OCT-1998; 98US-0103328P.
PR 01-SEP-1999; 99WO-US020111.
PR 18-OCT-1999; 99US-00403297.
PR 30-NOV-1999; 99WO-US028313.
PR 18-FEB-2000; 2000WO-US004342.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755072/71.
DR P-PSDB; ADB34339.
XX
PT New isolated, secreted and transmembrane PRO polypeptides and nucleic
PT acids, useful for the diagnosis, prevention and/or treatment of tumors,
PT such as lung, colon, breast, prostate, rectal, cervical and/or liver
PT tumors.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
Db 1129 TTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 221
ADB35442/c
ID ADB35442 standard; cDNA; 1129 BP.
XX
AC ADB35442;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human PRO polynucleotide SEQ ID NO 221.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003077719-A1.
XX
PD 24-APR-2003.
XX
PF 24-APR-2002; 2002US-00131824.
XX
PR 09-FEB-1999; 99US-0119341P.
PR 01-DEC-1999; 99WO-US028634.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755074/71.
DR P-PSDB; ADB35443.
XX
PT New isolated, secreted and transmembrane PRO polypeptides and nucleic
PT acids, useful for the diagnosis, prevention and/or treatment of tumors,
PT such as lung, colon, breast, prostate, rectal, cervical and/or liver
PT tumors.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the

CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 222
ADB33786/c
ID ADB33786 standard; cDNA; 1129 BP.
XX
AC ADB33786;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human PRO polynucleotide SEQ ID NO 221.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003077716-A1.
XX
PD 24-APR-2003.
XX
PF 24-APR-2002; 2002US-00131813.
XX
PR 07-OCT-1998; 98US-0103315P.
PR 01-SEP-1999; 99WO-US020111.
PR 18-OCT-1999; 99US-00403297.
PR 18-FEB-2000; 2000WO-US004342.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755071/71.
DR P-PSDB; ADB33787.
XX
PT New secreted and transmembrane PRO polypeptides and nucleic acids, useful
PT in gene therapy, in chromosome and gene mapping, as chromosome markers,
PT in tissue typing, and in identifying chromosomes.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 223
ADB34890/c
ID ADB34890 standard; cDNA; 1129 BP.
XX
AC ADB34890;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human PRO polynucleotide SEQ ID NO 221.

XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003077718-A1.
XX
PD 24-APR-2003.
XX
PF 24-APR-2002; 2002US-00131823.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755073/71.
DR P-PSDB; ADB34891.
XX
PT New isolated, secreted and transmembrane PRO polypeptides and nucleic
PT acids, useful for the diagnosis, prevention and/or treatment of tumors,
PT such as lung, colon, breast, prostate, rectal, cervical and/or liver
PT tumors.
XX
PS Claim 2; Fig 221; 638pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating

CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 224
ADB35994/c
ID ADB35994 standard; cDNA; 1129 BP.
XX
AC ADB35994;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human PRO polynucleotide SEQ ID NO 221.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003077720-A1.
XX
PD 24-APR-2003.
XX
PF 24-APR-2002; 2002US-00131830.
XX
PR 09-DEC-1999; 99US-0170262P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-755075/71.
DR P-PSDB; ADB35995.
XX
PT New isolated, secreted and transmembrane PRO polypeptides and nucleic
PT acids, useful for the diagnosis, prevention and/or treatment of tumors,
PT such as lung, colon, breast, prostate, rectal, cervical and/or liver
PT tumors.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 225
ADB46389/c
ID ADB46389 standard; cDNA; 1129 BP.
XX
AC ADB46389;
XX
DT 04-DEC-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; gene; ss;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inihibitor; cytokine release stimulator; tumour;
KW lung tumoue; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;

```
KW   gene therapy; chromosome identification; chromosome marker.
XX
OS   Homo sapiens.
XX
PN   US2003082692-A1.
XX
PD   01-MAY-2003.
XX
PF   22-APR-2002; 2002US-00127842.
XX
PR   03-MAR-2000; 2000US-0187202P.
PR   01-DEC-2000; 2000WO-US032678.
PR   19-DEC-2001; 2001US-00028072.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI   Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI   Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR   WPI; 2003-786906/74.
DR   P-PSDB; ADB46390.
XX
PT   New PRO nucleic acid, useful for preparing a composition for treating
PT   e.g., tumor or for tissue typing.
XX
PS   Claim 2; Fig 221; 637pp; English.
XX
CC   The invention describes 305 nucleic acids encoding PRO (secreted and
CC   transmembrane) polypeptides (I). (I) is useful for stimulating the
CC   release of TNF-alpha from human blood, for modulating the uptake of
CC   glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC   stimulating the proliferation or differentiation of chondrocyte cells,
CC   for stimulating the proliferation of or gene expression in pericyte
CC   cells, for stimulating the release of proteoglycans from cartilage, for
CC   stimulating the proliferation of inner ear utricular supporting cells,
CC   for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC   the release of a cytokine from PBMC cells, for inhibiting the binding of
CC   A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC   cells, for stimulating proliferation of endothelial cells, for detecting
CC   the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC   prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC   are useful for isolating genomic and cDNA nucleotide sequences or
CC   antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC   in assays to identify other proteins or molecules involved in binding
CC   interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC   and gene mapping, in generation of antisense RNA and DNA, in the
CC   preparation of PRO polypeptide, for generating transgenic animals or
CC   knockout animals which in turn are useful in the development and
CC   screening of therapeutically useful reagents, in gene therapy, for
CC   chromosome identification, as chromosome marker, and for generating
CC   probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC   detecting its expression in specific cells, tissues or serum, and for
CC   affinity purification of PRO from recombinant cell culture or natural
CC   sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC   a novel human secreted and transmembrane PRO polypeptide.
XX
SQ   Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 21.4;  DB 1;  Length 1129;
  Best Local Similarity   66.0%;  Pred. No. 95;
  Matches   31;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy       2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
             || ||  |||||| ||| ||| | |   |||  |||||||| ||
Db       1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083


RESULT 226
ADC50262/c
ID   ADC50262 standard; cDNA; 1129 BP.
XX
AC   ADC50262;
XX
DT   18-DEC-2003  (first entry)
XX
DE   Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW   Human; secreted and transmembrane protein; PRO; secreted polypeptide;
KW   transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha;
KW   chondrocyte; tumour; cancer; adrenal; lung; colon; breast; prostate;
KW   rectum; kidney; cervix; liver; microvascular endothelial cell;
KW   glucose uptake modulator; FFA uptake modulator; cell proliferation;
KW   cell differentiation; skeletal muscle cell; adipocyte cell;
KW   pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell;
KW   endothelial cell tube formation; bone disorder; cartilage disorder;
KW   sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW   rheumatoid arthritis; haemoglobin-associated disorder; thalassaemia;
KW   immune system cell infiltration; chromosome mapping; gene mapping;
KW   gene therapy; chromosome identification; chromosome marker; gene; ss.
XX
OS   Homo sapiens.
XX
PN   US2003092106-A1.
XX
PD   15-MAY-2003.
XX
PF   24-APR-2002; 2002US-00131822.
XX
PR   19-AUG-1998;   98US-0097141P.
PR   02-JUN-1999;   99WO-US012252.
PR   25-AUG-1999;   99US-00380137.
PR   30-MAR-2000; 2000WO-US008439.
PR   01-DEC-2000; 2000WO-US032678.
PR   19-DEC-2001; 2001US-00028072.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI   Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI   Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR   WPI; 2003-801171/75.
DR   P-PSDB; ADC50263.
XX
PT   New secreted and transmembrane nucleic acid useful for treating
PT   inflammation, organ failure, atherosclerosis, cardiac injury,
PT   infertility, birth defects, premature aging, acquired immunodeficiency
PT   syndrome or cancer.
XX
PS   Claim 2; Fig 221; 637pp; English.
XX
CC   The invention relates to isolated human PRO polypeptides (secreted and
CC   transmembrane polypeptides) and the polynucleotides encoding them. The
CC   invention also relates to an antibody which specifically binds to a PRO
CC   polypeptide, a method for stimulating the release of tumour necrosis
CC   factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC   proliferation or differentiation of chondrocyte cells and a method for
CC   detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC   colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC   polynucleotides are useful in molecular biology, including uses as
CC   hybridisation probes, in chromosome and gene mapping, in generating
CC   antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC   be used in preparing PRO polypeptides by recombinant techniques and in
CC   generating either transgenic animals or knock-out animals which are
CC   useful in the development and screening of therapeutically useful
CC   reagents. The PRO polypeptides or antibodies are used in preparing a
CC   medicament for treating a condition responsive to the polypeptides or
CC   antibodies, such as tumours, for stimulating and inhibiting proliferation
CC   of human microvascular endothelial cells, for modulating the uptake of
CC   glucose or FFA (free fatty acid) by skeletal muscle cells or adipocyte
CC   cells, for stimulating differentiation of adipocyte cells, for
CC   stimulating proliferation of or gene expression in pericyte cells, for
CC   stimulating the proliferation of inner ear utricular supporting cells or
CC   T-lymphocyte cells, for inducing endothelial cell tube formation and for
CC   treating various bone and/or cartilage disorders such as sports injuries
```

CC and arthritis. PRO polypeptides which stimulate the release of
CC proteoglycans from cartilage are useful for treating sports-related joint
CC problems, articular cartilage defects, osteoarthritis and rheumatoid
CC arthritis. PRO polypeptides are also useful for treating various
CC mammalian haemoglobin-associated disorders such as various thalassaemias
CC and conditions which may benefit from enhanced local immune system cell
CC infiltration. This sequence represents a human PRO polynucleotide of the
CC invention. Note: The sequence data for this patent is also available in
CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 227
ADC71809/c
ID ADC71809 standard; cDNA; 1129 BP.
XX
AC ADC71809;
XX
DT 18-DEC-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; secreted polypeptide;
KW transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha;
KW chondrocyte; tumour; cancer; adrenal; lung; colon; breast; prostate;
KW rectum; kidney; cervix; liver; microvascular endothelial cell;
KW glucose uptake modulator; FFA uptake modulator; cell proliferation;
KW cell differentiation; skeletal muscle cell; adipocyte cell;
KW pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder; thalassaemia;
KW immune system cell infiltration; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker; gene; ss.
XX
OS Homo sapiens.
XX
PN US2003092107-A1.
XX
PD 15-MAY-2003.
XX
PF 24-APR-2002; 2002US-00131828.
XX
PR 07-OCT-1998; 98US-0103315P.
PR 01-SEP-1999; 99WO-US020111.
PR 18-OCT-1999; 99US-00403297.
PR 18-FEB-2000; 2000WO-US004342.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-801172/75.
DR P-PSDB; ADC71810.
XX
PT New secreted and transmembrane nucleic acids and polypeptides, designated
PT as PRO, useful for treating inflammation, organ failure, atherosclerosis,
PT cardiac injury, infertility, birth defects, premature aging, AIDS, or
PT cancer.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA (free fatty acid) by skeletal muscle cells or adipocyte
CC cells, for stimulating differentiation of adipocyte cells, for
CC stimulating proliferation of or gene expression in pericyte cells, for
CC stimulating the proliferation of inner ear utricular supporting cells or
CC T-lymphocyte cells, for inducing endothelial cell tube formation and for
CC treating various bone and/or cartilage disorders such as sports injuries
CC and arthritis. PRO polypeptides which stimulate the release of
CC proteoglycans from cartilage are useful for treating sports-related joint
CC problems, articular cartilage defects, osteoarthritis and rheumatoid
CC arthritis. PRO polypeptides are also useful for treating various
CC mammalian haemoglobin-associated disorders such as various thalassaemias
CC and conditions which may benefit from enhanced local immune system cell
CC infiltration. This sequence represents a human PRO polynucleotide of the
CC invention. Note: The sequence data for this patent is also available in
CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 228
ADC59788/c
ID ADC59788 standard; cDNA; 1129 BP.
XX
AC ADC59788;
XX
DT 18-DEC-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; secreted polypeptide;
KW transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha;
KW chondrocyte; tumour; cancer; adrenal; lung; colon; breast; prostate;
KW rectum; kidney; cervix; liver; microvascular endothelial cell;
KW glucose uptake modulator; FFA uptake modulator; cell proliferation;
KW cell differentiation; skeletal muscle cell; adipocyte cell;
KW pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder; thalassaemia;
KW immune system cell infiltration; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker; gene; ss.
XX
OS Homo sapiens.
XX

PN US2003092105-A1.
XX
PD 15-MAY-2003.
XX
PF 24-APR-2002; 2002US-00131821.
XX
PR 09-DEC-1999; 99US-0170262P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-801170/75.
DR P-PSDB; ADC59789.
XX
PT New secreted and transmembrane nucleic acids and polypeptides, designated
PT as PRO, useful for treating inflammation, organ failure, atherosclerosis,
PT cardiac injury, infertility, birth defects, premature aging, AIDS, or
PT cancer.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA (free fatty acid) by skeletal muscle cells or adipocyte
CC cells, for stimulating differentiation of adipocyte cells, for
CC stimulating proliferation of or gene expression in pericyte cells, for
CC stimulating the proliferation of inner ear utricular supporting cells or
CC T-lymphocyte cells, for inducing endothelial cell tube formation and for
CC treating various bone and/or cartilage disorders such as sports injuries
CC and arthritis. PRO polypeptides which stimulate the release of
CC proteoglycans from cartilage are useful for treating sports-related joint
CC problems, articular cartilage defects, osteoarthritis and rheumatoid
CC arthritis. PRO polypeptides are also useful for treating various
CC mammalian haemoglobin-associated disorders such as various thalassaemias
CC and conditions which may benefit from enhanced local immune system cell
CC infiltration. This sequence represents a human PRO polynucleotide of the
CC invention. Note: The sequence data for this patent is also available in
CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 229
ADC52795/c

ID ADC52795 standard; cDNA; 1129 BP.
XX
AC ADC52795;
XX
DT 18-DEC-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein cDNA Seq ID221.
XX
KW human; PRO; membrane bound protein; membrane bound receptor;
KW cell proliferation; cell migration; cell differentiation;
KW mitogenic factor; survival factor; cytotoxic factor;
KW differentiation factor; neuropeptide; hormone; cell receptor;
KW receptor-ligand interaction; cytostatic; chondrocyte; tumour; ss; gene.
XX
OS Homo sapiens.
XX
PN US2003087365-A1.
XX
PD 08-MAY-2003.
XX
PF 23-APR-2002; 2002US-00128689.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 10-MAR-1999; 2000WO-US006319.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.

PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godwoski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-801150/75.
DR P-PSDB; ADC52796.
XX
PT New PRO nucleic acid, useful for manufacturing a medicament for
PT diagnosing or treating tumor.
XX
PS Claim 2; SEQ ID NO 221; 637pp; English.
XX
CC This invention relates to novel nucleic acids encoding human PRO secreted
CC and transmembrane proteins. Extracellular proteins play important roles
CC in the formation, differentiation and maintenance of multicellular
CC organisms. The fate of many individual cells (for example proliferation,
CC migration or differentiation) is typically governed by information
CC received from other cells and the immediate environment. The information
CC is often transmitted by secreted polypeptides (for example mitogenic
CC factors, survival factors, cytotoxic factors, differentiation factors,
CC neuropeptides and hormones) which are received and interpreted by diverse
CC cell receptors or membrane bound proteins. These membrane bound proteins
CC and receptors may be of use as pharmaceutical and diagnostic agents, such
CC as in the blocking of receptor-ligand interactions. The current invention
CC provides the amino acid sequences of novel human membrane bound receptors
CC and proteins, along with the cDNA sequences encoding them. The novel
CC proteins of the invention may have cytostatic activities through the
CC stimulation of chondrocytes. The nucleic acids of the invention may be
CC useful for the manufacture of a medicament for diagnosing or treating a
CC tumour in a mammal. In addition, they may be useful for measuring or
CC detecting the expression of a tumour associated gene. The present
CC sequence is a cDNA sequence which encodes a human PRO protein of the
CC invention.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 230
ADC57149/c
ID ADC57149 standard; cDNA; 1129 BP.
XX
AC ADC57149;
XX
DT 18-DEC-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein cDNA Seq ID221.
XX
KW human; PRO; membrane bound protein; membrane bound receptor;
KW cell proliferation; cell migration; cell differentiation;
KW mitogenic factor; survival factor; cytotoxic factor;
KW differentiation factor; neuropeptide; hormone; cell receptor;
KW receptor-ligand interaction; cytostatic; chondrocyte; tumour; ss; gene.
XX
OS Homo sapiens.
XX
PN US2003087366-A1.
XX
PD 08-MAY-2003.
XX
PF 23-APR-2002; 2002US-00128694.
XX
PR 02-MAR-2000; 2000WO-US005841.
PR 30-MAY-2000; 2000WO-US014941.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-801151/75.
DR P-PSDB; ADC57150.
XX
PT New PRO nucleic acid, useful for manufacturing a medicament for
PT diagnosing or treating tumor.
XX
PS Claim 2; SEQ ID NO 221; 637pp; English.
XX
CC This invention relates to novel nucleic acids encoding human PRO secreted
CC and transmembrane proteins. Extracellular proteins play important roles
CC in the formation, differentiation and maintenance of multicellular
CC organisms. The fate of many individual cells (for example proliferation,
CC migration or differentiation) is typically governed by information
CC received from other cells and the immediate environment. The information
CC is often transmitted by secreted polypeptides (for example mitogenic

CC factors, survival factors, cytotoxic factors, differentiation factors,
CC neuropeptides and hormones) which are received and interpreted by diverse
CC cell receptors or membrane bound proteins. These membrane bound proteins
CC and receptors may be of use as pharmaceutical and diagnostic agents, such
CC as in the blocking of receptor-ligand interactions. The current invention
CC provides the amino acid sequences of novel human membrane bound receptors
CC and proteins, along with the cDNA sequences encoding them. The novel
CC proteins of the invention may have cytostatic activities through the
CC stimulation of chondrocytes. The nucleic acids of the invention may be
CC useful for the manufacture of a medicament for diagnosing or treating a
CC tumour in a mammal. In addition, they may be useful for measuring or
CC detecting the expression of a tumour associated gene. The present
CC sequence is a cDNA sequence which encodes a human PRO protein of the
CC invention.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 231
ADC60340/c
ID ADC60340 standard; cDNA; 1129 BP.
XX
AC ADC60340;
XX
DT 18-DEC-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; secreted polypeptide;
KW transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha;
KW chondrocyte; tumour; cancer; adrenal; lung; colon; breast; prostate;
KW rectum; kidney; cervix; liver; microvascular endothelial cell;
KW glucose uptake modulator; FFA uptake modulator; cell proliferation;
KW cell differentiation; skeletal muscle cell; adipocyte cell;
KW pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder; thalassaemia;
KW immune system cell infiltration; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker; gene; ss.
XX
OS Homo sapiens.
XX
PN US2003087367-A1.
XX
PD 08-MAY-2003.
XX
PF 24-APR-2002; 2002US-00131825.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 10-MAR-1999; 2000WO-US006319.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.

PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-801152/75.
DR P-PSDB; ADC60341.
XX
PT New PRO nucleic acid, useful for preparing a recombinant PRO polypeptide
PT and for manufacturing a medicament for diagnosing or treating tumor.
XX
PS Claim 2; Fig 221; 638pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA (free fatty acid) by skeletal muscle cells or adipocyte
CC cells, for stimulating differentiation of adipocyte cells, for
CC stimulating proliferation of or gene expression in pericyte cells, for
CC stimulating the proliferation of inner ear utricular supporting cells or
CC T-lymphocyte cells, for inducing endothelial cell tube formation and for
CC treating various bone and/or cartilage disorders such as sports injuries
CC and arthritis. PRO polypeptides which stimulate the release of
CC proteoglycans from cartilage are useful for treating sports-related joint
CC problems, articular cartilage defects, osteoarthritis and rheumatoid
CC arthritis. PRO polypeptides are also useful for treating various
CC mammalian haemoglobin-associated disorders such as various thalassaemias
CC and conditions which may benefit from enhanced local immune system cell
CC infiltration. This sequence represents a human PRO polynucleotide of the
CC invention. Note: The sequence data for this patent is also available in
CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 232
ADC50815/c
ID ADC50815 standard; cDNA; 1129 BP.
XX
AC ADC50815;
XX
DT 18-DEC-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; secreted polypeptide;
KW transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha;
KW chondrocyte; tumour; cancer; adrenal; lung; colon; breast; prostate;
KW rectum; kidney; cervix; liver; microvascular endothelial cell;
KW glucose uptake modulator; FFA uptake modulator; cell proliferation;
KW cell differentiation; skeletal muscle cell; adipocyte cell;
KW pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder; thalassaemia;
KW immune system cell infiltration; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker; gene; ss.
XX
OS Homo sapiens.
XX
PN US2003087361-A1.
XX
PD 08-MAY-2003.
XX
PF 22-APR-2002; 2002US-00127841.
XX
PR 09-SEP-1998; 98US-0099536P.
PR 01-SEP-1999; 99WO-US020111.
PR 18-OCT-1999; 99US-00403297.
PR 18-FEB-2000; 2000WO-US004342.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-801146/75.
DR P-PSDB; ADC50816.
XX
PT New PRO nucleic acid, useful for preparing a recombinant PRO polypeptide
PT and for manufacturing a medicament for diagnosing or treating tumor.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA (free fatty acid) by skeletal muscle cells or adipocyte
CC cells, for stimulating differentiation of adipocyte cells, for
CC stimulating proliferation of or gene expression in pericyte cells, for
CC stimulating the proliferation of inner ear utricular supporting cells or
CC T-lymphocyte cells, for inducing endothelial cell tube formation and for
CC treating various bone and/or cartilage disorders such as sports injuries

CC and arthritis. PRO polypeptides which stimulate the release of
CC proteoglycans from cartilage are useful for treating sports-related joint
CC problems, articular cartilage defects, osteoarthritis and rheumatoid
CC arthritis. PRO polypeptides are also useful for treating various
CC mammalian haemoglobin-associated disorders such as various thalassaemias
CC and conditions which may benefit from enhanced local immune system cell
CC infiltration. This sequence represents a human PRO polynucleotide of the
CC invention. Note: The sequence data for this patent is also available in
CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 233
ADC65342/c
ID ADC65342 standard; cDNA; 1129 BP.
XX
AC ADC65342;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003087362-A1.
XX
PD 08-MAY-2003.
XX
PF 22-APR-2002; 2002US-00127844.
XX
PR 05-JUN-2000; 2000US-0209832P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-801147/75.
DR P-PSDB; ADC65343.
XX
PT New PRO nucleic acid, useful for manufacturing a medicament for
PT diagnosing or treating tumor.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 234
ADC54440/c
ID ADC54440 standard; cDNA; 1129 BP.
XX
AC ADC54440;
XX
DT 18-DEC-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein cDNA Seq ID221.
XX
KW human; PRO; membrane bound protein; membrane bound receptor;
KW cell proliferation; cell migration; cell differentiation;
KW mitogenic factor; survival factor; cytotoxic factor;
KW differentiation factor; neuropeptide; hormone; cell receptor;
KW receptor-ligand interaction; cytostatic; chondrocyte; tumour; ss; gene.
XX
OS Homo sapiens.
XX
PN US2003087363-A1.
XX
PD 08-MAY-2003.
XX
PF 23-APR-2002; 2002US-00128687.
XX
PR 10-SEP-1998; 98US-0099816P.
PR 01-SEP-1999; 99WO-US020111.
PR 18-OCT-1999; 99US-00403297.
PR 18-FEB-2000; 2000WO-US004342.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX

PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-801148/75.
DR P-PSDB; ADC54441.
XX
PT New PRO nucleic acid, useful for preparing a recombinant PRO polypeptide
PT and for manufacturing a medicament for diagnosing or treating tumor.
XX
PS Claim 2; SEQ ID NO 221; 637pp; English.
XX
CC This invention relates to novel nucleic acids encoding human PRO secreted
CC and transmembrane proteins. Extracellular proteins play important roles
CC in the formation, differentiation and maintenance of multicellular
CC organisms. The fate of many individual cells (for example proliferation,
CC migration or differentiation) is typically governed by information
CC received from other cells and the immediate environment. The information
CC is often transmitted by secreted polypeptides (for example mitogenic
CC factors, survival factors, cytotoxic factors, differentiation factors,
CC neuropeptides and hormones) which are received and interpreted by diverse
CC cell receptors or membrane bound proteins. These membrane bound proteins
CC and receptors may be of use as pharmaceutical and diagnostic agents, such
CC as in the blocking of receptor-ligand interactions. The current invention
CC provides the amino acid sequences of novel human membrane bound receptors
CC and proteins, along with the cDNA sequences encoding them. The novel
CC proteins of the invention may have cytostatic activities through the
CC stimulation of chondrocytes. The nucleic acids of the invention may be
CC useful for the manufacture of a medicament for diagnosing or treating a
CC tumour in a mammal. In addition, they may be useful for measuring or
CC detecting the expression of a tumour associated gene. The present
CC sequence is a cDNA sequence which encodes a human PRO protein of the
CC invention.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 235
ADC53401/c
ID ADC53401 standard; cDNA; 1129 BP.
XX
AC ADC53401;
XX
DT 18-DEC-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein cDNA Seq ID221.
XX
KW human; PRO; membrane bound protein; membrane bound receptor;
KW cell proliferation; cell migration; cell differentiation;
KW mitogenic factor; survival factor; cytotoxic factor;
KW differentiation factor; neuropeptide; hormone; cell receptor;
KW receptor-ligand interaction; cytostatic; chondrocyte; tumour; ss; gene.
XX
OS Homo sapiens.
XX
PN US2003087364-A1.
XX
PD 08-MAY-2003.
XX
PF 23-APR-2002; 2002US-00128688.
XX
PR 09-FEB-1999; 99US-0119341P.
PR 01-DEC-1999; 99WO-US028634.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-801149/75.
DR P-PSDB; ADC53402.
XX
PT New PRO nucleic acid, useful for manufacturing a medicament for
PT diagnosing or treating tumor.
XX
PS Claim 2; SEQ ID NO 221; 637pp; English.
XX
CC This invention relates to novel nucleic acids encoding human PRO secreted
CC and transmembrane proteins. Extracellular proteins play important roles
CC in the formation, differentiation and maintenance of multicellular
CC organisms. The fate of many individual cells (for example proliferation,
CC migration or differentiation) is typically governed by information
CC received from other cells and the immediate environment. The information
CC is often transmitted by secreted polypeptides (for example mitogenic
CC factors, survival factors, cytotoxic factors, differentiation factors,
CC neuropeptides and hormones) which are received and interpreted by diverse
CC cell receptors or membrane bound proteins. These membrane bound proteins
CC and receptors may be of use as pharmaceutical and diagnostic agents, such
CC as in the blocking of receptor-ligand interactions. The current invention
CC provides the amino acid sequences of novel human membrane bound receptors
CC and proteins, along with the cDNA sequences encoding them. The novel
CC proteins of the invention may have cytostatic activities through the
CC stimulation of chondrocytes. The nucleic acids of the invention may be
CC useful for the manufacture of a medicament for diagnosing or treating a
CC tumour in a mammal. In addition, they may be useful for measuring or
CC detecting the expression of a tumour associated gene. The present
CC sequence is a cDNA sequence which encodes a human PRO protein of the
CC invention.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 236
ADC58924/c
ID ADC58924 standard; cDNA; 1129 BP.
XX
AC ADC58924;
XX
DT 18-DEC-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein cDNA Seq ID221.
XX
KW human; PRO; membrane bound protein; membrane bound receptor;
KW cell proliferation; cell migration; cell differentiation;
KW mitogenic factor; survival factor; cytotoxic factor;
KW differentiation factor; neuropeptide; hormone; cell receptor;
KW receptor-ligand interaction; cytostatic; chondrocyte; tumour; ss; gene.
XX
OS Homo sapiens.
XX
PN US2003087359-A1.
XX
PD 08-MAY-2003.
XX
PF 22-APR-2002; 2002US-00127834.
XX
PR 17-SEP-1998; 98US-0100710P.

PR 01-SEP-1999; 99WO-US020111.
PR 18-OCT-1999; 99US-00403297.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-801144/75.
DR P-PSDB; ADC58925.
XX
PT New PRO nucleic acid, useful for preparing a recombinant PRO polypeptide
PT and for manufacturing a medicament for diagnosing or treating tumor.
XX
PS Claim 2; SEQ ID NO 221; 637pp; English.
XX
CC This invention relates to novel nucleic acids encoding human PRO secreted
CC and transmembrane proteins. Extracellular proteins play important roles
CC in the formation, differentiation and maintenance of multicellular
CC organisms. The fate of many individual cells (for example proliferation,
CC migration or differentiation) is typically governed by information
CC received from other cells and the immediate environment. The information
CC is often transmitted by secreted polypeptides (for example mitogenic
CC factors, survival factors, cytotoxic factors, differentiation factors,
CC neuropeptides and hormones) which are received and interpreted by diverse
CC cell receptors or membrane bound proteins. These membrane bound proteins
CC and receptors may be of use as pharmaceutical and diagnostic agents, such
CC as in the blocking of receptor-ligand interactions. The current invention
CC provides the amino acid sequences of novel human membrane bound receptors
CC and proteins, along with the cDNA sequences encoding them. The novel
CC proteins of the invention may have cytostatic activities through the
CC stimulation of chondrocytes. The nucleic acids of the invention may be
CC useful for the manufacture of a medicament for diagnosing or treating a
CC tumour in a mammal. In addition, they may be useful for measuring or
CC detecting the expression of a tumour associated gene. The present
CC sequence is a cDNA sequence which encodes a human PRO protein of the
CC invention.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 237
ADC55802/c
ID ADC55802 standard; cDNA; 1129 BP.
XX
AC ADC55802;
XX
DT 18-DEC-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein cDNA Seq ID221.
XX
KW human; PRO; membrane bound protein; membrane bound receptor;
KW cell proliferation; cell migration; cell differentiation;
KW mitogenic factor; survival factor; cytotoxic factor;
KW differentiation factor; neuropeptide; hormone; cell receptor;
KW receptor-ligand interaction; cytostatic; chondrocyte; tumour; ss; gene.
XX
OS Homo sapiens.
XX
PN US2003087360-A1.
XX
PD 08-MAY-2003.
XX
PF 22-APR-2002; 2002US-00127836.
XX
PR 17-NOV-1998; 98US-0108802P.
PR 01-SEP-1999; 99WO-US020111.
PR 18-OCT-1999; 99US-00403297.
PR 18-FEB-2000; 2000WO-US004342.
PR 02-JUN-2000; 2000WO-US015264.
PR 23-AUG-2000; 2000WO-US023522.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-801145/75.
DR P-PSDB; ADC55803.
XX
PT New PRO nucleic acid, useful for manufacturing a medicament for
PT diagnosing or treating tumor.
XX
PS Claim 2; SEQ ID NO 221; 637pp; English.
XX
CC This invention relates to novel nucleic acids encoding human PRO secreted
CC and transmembrane proteins. Extracellular proteins play important roles
CC in the formation, differentiation and maintenance of multicellular
CC organisms. The fate of many individual cells (for example proliferation,
CC migration or differentiation) is typically governed by information
CC received from other cells and the immediate environment. The information
CC is often transmitted by secreted polypeptides (for example mitogenic
CC factors, survival factors, cytotoxic factors, differentiation factors,
CC neuropeptides and hormones) which are received and interpreted by diverse
CC cell receptors or membrane bound proteins. These membrane bound proteins
CC and receptors may be of use as pharmaceutical and diagnostic agents, such
CC as in the blocking of receptor-ligand interactions. The current invention
CC provides the amino acid sequences of novel human membrane bound receptors
CC and proteins, along with the cDNA sequences encoding them. The novel
CC proteins of the invention may have cytostatic activities through the
CC stimulation of chondrocytes. The nucleic acids of the invention may be
CC useful for the manufacture of a medicament for diagnosing or treating a
CC tumour in a mammal. In addition, they may be useful for measuring or
CC detecting the expression of a tumour associated gene. The present
CC sequence is a cDNA sequence which encodes a human PRO protein of the
CC invention.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 238
ADC58372/c
ID ADC58372 standard; cDNA; 1129 BP.
XX
AC ADC58372;
XX
DT 18-DEC-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein cDNA Seq ID221.
XX
KW human; PRO; membrane bound protein; membrane bound receptor;
KW cell proliferation; cell migration; cell differentiation;
KW mitogenic factor; survival factor; cytotoxic factor;

KW differentiation factor; neuropeptide; hormone; cell receptor;
KW receptor-ligand interaction; cytostatic; chondrocyte; tumour; ss; gene.
XX
OS Homo sapiens.
XX
PN US2003087346-A1.
XX
PD 08-MAY-2003.
XX
PF 17-APR-2002; 2002US-00124815.
XX
PR 09-DEC-1999; 99US-0170262P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-801137/75.
DR P-PSDB; ADC58373.
XX
PT Isolated nucleic acid for use in industrial applications has at least 80
PT percent nucleic acid sequence identity to nucleotide sequence that
PT encodes amino acid sequence selected from amino acid sequence group.
XX
PS Claim 2; SEQ ID NO 221; 637pp; English.
XX
CC This invention relates to novel nucleic acids encoding human PRO secreted
CC and transmembrane proteins. Extracellular proteins play important roles
CC in the formation, differentiation and maintenance of multicellular
CC organisms. The fate of many individual cells (for example proliferation,
CC migration or differentiation) is typically governed by information
CC received from other cells and the immediate environment. The information
CC is often transmitted by secreted polypeptides (for example mitogenic
CC factors, survival factors, cytotoxic factors, differentiation factors,
CC neuropeptides and hormones) which are received and interpreted by diverse
CC cell receptors or membrane bound proteins. These membrane bound proteins
CC and receptors may be of use as pharmaceutical and diagnostic agents, such
CC as in the blocking of receptor-ligand interactions. The current invention
CC provides the amino acid sequences of novel human membrane bound receptors
CC and proteins, along with the cDNA sequences encoding them. The novel
CC proteins of the invention may have cytostatic activities through the
CC stimulation of chondrocytes. The nucleic acids of the invention may be
CC useful for the manufacture of a medicament for diagnosing or treating a
CC tumour in a mammal. In addition, they may be useful for measuring or
CC detecting the expression of a tumour associated gene. The present
CC sequence is a cDNA sequence which encodes a human PRO protein of the
CC invention.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 239
ADD03046/c
ID ADD03046 standard; cDNA; 1129 BP.
XX
AC ADD03046;
XX
DT 01-JAN-2004 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; secreted polypeptide;
KW transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha;
KW chondrocyte; tumour; cancer; adrenal; lung; colon; breast; prostate;
KW rectum; kidney; cervix; liver; microvascular endothelial cell;
KW glucose uptake modulator; FFA uptake modulator; cell proliferation;
KW cell differentiation; skeletal muscle cell; adipocyte cell;
KW pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder; thalassaemia;
KW immune system cell infiltration; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker; gene; ss.
XX
OS Homo sapiens.
XX
PN US2003092104-A1.
XX
PD 15-MAY-2003.
XX
PF 24-APR-2002; 2002US-00131817.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.

PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-801169/75.
DR P-PSDB; ADD03047.
XX
PT New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 or
PT PRO4978, useful in molecular biology, chromosome and gene mapping, in
PT generating antisense RNA and DNA, and in gene therapy.
XX
PS Claim 2; Fig 221; 638pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA (free fatty acid) by skeletal muscle cells or adipocyte
CC cells, for stimulating differentiation of adipocyte cells, for
CC stimulating proliferation of or gene expression in pericyte cells, for
CC stimulating the proliferation of inner ear utricular supporting cells or
CC T-lymphocyte cells, for inducing endothelial cell tube formation and for
CC treating various bone and/or cartilage disorders such as sports injuries
CC and arthritis. PRO polypeptides which stimulate the release of
CC proteoglycans from cartilage are useful for treating sports-related joint
CC problems, articular cartilage defects, osteoarthritis and rheumatoid
CC arthritis. PRO polypeptides are also useful for treating various
CC mammalian haemoglobin-associated disorders such as various thalassaemias
CC and conditions which may benefit from enhanced local immune system cell
CC infiltration. This sequence represents a human PRO polynucleotide of the
CC invention. Note: The sequence data for this patent is also available in
CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 240
ADC90038/c
ID ADC90038 standard; cDNA; 1129 BP.
XX
AC ADC90038;
XX
DT 01-JAN-2004 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; gene; ss;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inhibitor; cytokine release stimulator; tumour;
KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX
OS Homo sapiens.
XX
PN US2003087348-A1.
XX
PD 08-MAY-2003.
XX
PF 19-APR-2002; 2002US-00125923.
XX
PR 05-JUN-2000; 2000US-0209832P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-786939/74.

DR P-PSDB; ADC90039.
XX
PT New PRO nucleic acid, useful for manufacturing a medicament for
PT diagnosing or treating tumor.
XX
PS Claim 2; SEQ ID NO 221; 637pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC a novel human secreted and transmembrane PRO polypeptide.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 241
ADC69457/c
ID ADC69457 standard; cDNA; 1129 BP.
XX
AC ADC69457;
XX
DT 01-JAN-2004 (first entry)
XX
DE cDNA encoding human PRO polypeptide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003194770-A1.
XX
PD 16-OCT-2003.
XX
PF 21-MAY-2002; 2002US-00152375.
XX
PR 03-MAR-2000; 2000US-0187202P.
PR 30-MAY-2000; 2000WO-US014941.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-844453/78.
DR P-PSDB; ADC69458.
XX
PT New isolated, secreted and transmembrane PRO polypeptides and nucleic
PT acids, useful for the diagnosis, prevention and/or treatment of tumors,
PT such as lung, colon, breast, prostate, rectal, cervical and/or liver
PT tumors.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence encodes a human PRO polypeptide of the invention. Note: The
CC sequence data for this patent is also available in electronic format from
CC the USPTO website at seqdata.uspto.gov.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 242
ADC48346/c
ID ADC48346 standard; cDNA; 1129 BP.
XX

```
AC   ADC48346;
XX
DT   01-JAN-2004  (first entry)
XX
DE   Human PRO polynucleotide #111.
XX
KW   Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW   tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW   cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW   liver; microvascular endothelial cell; glucose; FFA;
KW   skeletal muscle cell; adipocyte cell; pericyte cell;
KW   inner ear utricular supporting cell; T-lymphocyte cell;
KW   endothelial cell tube formation; bone disorder; cartilage disorder;
KW   sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW   rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW   immune system cell infiltration.
XX
OS   Homo sapiens.
XX
PN   US2003194773-A1.
XX
PD   16-OCT-2003.
XX
PF   21-MAY-2002; 2002US-00152391.
XX
PR   09-DEC-1999;   99US-0170262P.
PR   30-MAY-2000; 2000WO-US014941.
PR   01-DEC-2000; 2000WO-US032678.
PR   19-DEC-2001; 2001US-00028072.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Baker KP,  Beresini M,  Deforge L,  Desnoyers L,  Filvaroff E,  Gao W;
PI   Gerritsen ME,  Goddard A,  Godowski PJ,  Gurney AL,  Sherwood S;
PI   Smith V,  Stewart TA,  Tumas D,  Watanabe CK,  Wood WI,  Zhang Z;
XX
DR   WPI; 2003-844455/78.
DR   P-PSDB; ADC48347.
XX
PT   New secreted and transmembrane PRO nucleic acids and polypeptides, useful
PT   for detecting a tumor, stimulating the release of tumor necrosis factor
PT   alpha and stimulating the proliferation of endothelial cells.
XX
PS   Claim 2; Fig 221; 637pp; English.
XX
CC   The invention relates to isolated human PRO polypeptides (secreted and
CC   transmembrane polypeptides) and the polynucleotides encoding them. The
CC   invention also relates to an antibody which specifically binds to a PRO
CC   polypeptide, a method for stimulating the release of tumour necrosis
CC   factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC   proliferation or differentiation of chondrocyte cells and a method for
CC   detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC   colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC   polynucleotides are useful in molecular biology, including uses as
CC   hybridisation probes, in chromosome and gene mapping, in generating
CC   antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC   be used in preparing PRO polypeptides by recombinant techniques and in
CC   generating either transgenic animals or knock-out animals which are
CC   useful in the development and screening of therapeutically useful
CC   reagents. The PRO polypeptides or antibodies are used in preparing a
CC   medicament for treating a condition responsive to the polypeptides or
CC   antibodies, such as tumours, for stimulating and inhibiting proliferation
CC   of human microvascular endothelial cells, for modulating the uptake of
CC   glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC   stimulating differentiation of adipocyte cells, for stimulating
CC   proliferation of or gene expression in pericyte cells, for stimulating
CC   the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC   cells, for inducing endothelial cell tube formation and for treating
CC   various bone and/or cartilage disorders such as sports injuries and
CC   arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC   from cartilage are useful for treating sports-related joint problems,
CC   articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC   polypeptides are also useful for treating various mammalian haemoglobin-
CC   associated disorders such as various thalassaemias and conditions which
CC   may benefit from enhanced local immune system cell infiltration. This
CC   sequence represents a human PRO polynucleotide of the invention. Note:
CC   The sequence data for this patent is also available in electronic format
CC   from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ   Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 21.4;  DB 1;  Length 1129;
  Best Local Similarity   66.0%;  Pred. No. 95;
  Matches   31;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy       2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
             || ||  ||||||  ||| ||| |  |   |||  ||||||||  ||
Db       1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083


RESULT 243
ADD09875/c
ID   ADD09875 standard; cDNA; 1129 BP.
XX
AC   ADD09875;
XX
DT   01-JAN-2004  (first entry)
XX
DE   Human PRO polynucleotide #111.
XX
KW   Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW   tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW   cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW   liver; microvascular endothelial cell; glucose; FFA;
KW   skeletal muscle cell; adipocyte cell; pericyte cell;
KW   inner ear utricular supporting cell; T-lymphocyte cell;
KW   endothelial cell tube formation; bone disorder; cartilage disorder;
KW   sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW   rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW   immune system cell infiltration.
XX
OS   Homo sapiens.
XX
PN   US2003194776-A1.
XX
PD   16-OCT-2003.
XX
PF   29-MAY-2002; 2002US-00157785.
XX
PR   05-JUN-2000; 2000US-0209832P.
PR   01-DEC-2000; 2000WO-US032678.
PR   19-DEC-2001; 2001US-00028072.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Baker KP,  Beresini M,  Deforge L,  Desnoyers L,  Filvaroff E,  Gao W;
PI   Gerritsen ME,  Goddard A,  Godowski PJ,  Gurney AL,  Sherwood S;
PI   Smith V,  Stewart TA,  Tumas D,  Watanabe CK,  Wood WI,  Zhang Z;
XX
DR   WPI; 2003-852596/79.
DR   P-PSDB; ADD09876.
XX
PT   New secreted and transmembrane PRO nucleic acids and polypeptides, useful
PT   for detecting a tumor, stimulating the release of proteoglycans from
PT   cartilage and inhibiting the differentiation of adipocyte cells.
XX
PS   Claim 2; Fig 221; 637pp; English.
XX
CC   The invention relates to isolated human PRO polypeptides (secreted and
CC   transmembrane polypeptides) and the polynucleotides encoding them. The
CC   invention also relates to an antibody which specifically binds to a PRO
CC   polypeptide, a method for stimulating the release of tumour necrosis
CC   factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC   proliferation or differentiation of chondrocyte cells and a method for
CC   detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC   colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
```

CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells; for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 244
ADD04450/c
ID ADD04450 standard; cDNA; 1129 BP.
XX
AC ADD04450;
XX
DT 01-JAN-2004 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; secreted polypeptide;
KW transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha;
KW chondrocyte; tumour; cancer; adrenal; lung; colon; breast; prostate;
KW rectum; kidney; cervix; liver; microvascular endothelial cell;
KW glucose uptake modulator; FFA uptake modulator; cell proliferation;
KW cell differentiation; skeletal muscle cell; adipocyte cell;
KW pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder; thalassaemia;
KW immune system cell infiltration; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker; gene; ss.
XX
OS Homo sapiens.
XX
PN US2003087354-A1.
XX
PD 08-MAY-2003.
XX
PF 22-APR-2002; 2002US-00127827.
XX
PR 17-AUG-1998; 98US-0096891P.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380137.
PR 30-MAR-2000; 2000WO-US008439.
PR 30-MAY-2000; 2000WO-US014941.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-801139/75.
DR P-PSDB; ADD04451.
XX
PT New PRO nucleic acid, useful for manufacturing a medicament for
PT diagnosing or treating tumor.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA (free fatty acid) by skeletal muscle cells or adipocyte
CC cells, for stimulating differentiation of adipocyte cells, for
CC stimulating proliferation of or gene expression in pericyte cells, for
CC stimulating the proliferation of inner ear utricular supporting cells or
CC T-lymphocyte cells, for inducing endothelial cell tube formation and for
CC treating various bone and/or cartilage disorders such as sports injuries
CC and arthritis. PRO polypeptides which stimulate the release of
CC proteoglycans from cartilage are useful for treating sports-related joint
CC problems, articular cartilage defects, osteoarthritis and rheumatoid
CC arthritis. PRO polypeptides are also useful for treating various
CC mammalian haemoglobin-associated disorders such as various thalassaemias
CC and conditions which may benefit from enhanced local immune system cell
CC infiltration. This sequence represents a human PRO polynucleotide of the
CC invention. Note: The sequence data for this patent is also available in
CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 245
ADC80406/c
ID ADC80406 standard; cDNA; 1129 BP.
XX
AC ADC80406;
XX
DT 01-JAN-2004 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; secreted polypeptide;

KW transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha;
KW chondrocyte; tumour; cancer; adrenal; lung; colon; breast; prostate;
KW rectum; kidney; cervix; liver; microvascular endothelial cell;
KW glucose uptake modulator; FFA uptake modulator; cell proliferation;
KW cell differentiation; skeletal muscle cell; adipocyte cell;
KW pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder; thalassaemia;
KW immune system cell infiltration; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker; gene; ss.
XX
OS Homo sapiens.
XX
PN US2003092103-A1.
XX
PD 15-MAY-2003.
XX
PF 24-APR-2002; 2002US-00131815.
XX
PR 22-DEC-1998; 98US-0113511P.
PR 01-DEC-1999; 99WO-US028634.
PR 22-FEB-2000; 2000WO-US004414.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-801168/75.
DR P-PSDB; ADC80407.
XX
PT New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 or
PT PRO4978, useful in molecular biology, chromosome and gene mapping, in
PT generating antisense RNA and DNA, and in gene therapy.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA (free fatty acid) by skeletal muscle cells or adipocyte
CC cells, for stimulating differentiation of adipocyte cells, for
CC stimulating proliferation of or gene expression in pericyte cells, for
CC stimulating the proliferation of inner ear utricular supporting cells or
CC T-lymphocyte cells, for inducing endothelial cell tube formation and for
CC treating various bone and/or cartilage disorders such as sports injuries
CC and arthritis. PRO polypeptides which stimulate the release of
CC proteoglycans from cartilage are useful for treating sports-related joint
CC problems, articular cartilage defects, osteoarthritis and rheumatoid
CC arthritis. PRO polypeptides are also useful for treating various
CC mammalian haemoglobin-associated disorders such as various thalassaemias
CC and conditions which may benefit from enhanced local immune system cell
CC infiltration. This sequence represents a human PRO polynucleotide of the
CC invention. Note: The sequence data for this patent is also available in
CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 246
ADD10913/c
ID ADD10913 standard; cDNA; 1129 BP.
XX
AC ADD10913;
XX
DT 01-JAN-2004 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003194774-A1.
XX
PD 16-OCT-2003.
XX
PF 21-MAY-2002; 2002US-00152399.
XX
PR 03-MAR-2000; 2000US-0187202P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-852594/79.
DR P-PSDB; ADD10914.
XX
PT New secreted and transmembrane PRO nucleic acids and polypeptides, useful
PT for detecting a tumor, stimulating the proliferation or differentiation
PT of chondrocyte cells and stimulating the release of tumor necrosis factor
PT alpha.
XX
PS Claim 2; SEQ ID NO 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also

CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| ||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 247
ADC47794/c
ID ADC47794 standard; cDNA; 1129 BP.
XX
AC ADC47794;
XX
DT 01-JAN-2004 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003194771-A1.
XX
PD 16-OCT-2003.
XX
PF 21-MAY-2002; 2002US-00152377.
XX
PR 09-DEC-1999; 99US-0170262P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Gurney SL, Smith V;
PI Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-844454/78.
DR P-PSDB; ADC47795.
XX
PT New secreted and transmembrane PRO polypeptides and nucleic acids useful
PT for detecting a tumor, stimulating the release of proteoglycans from
PT cartilage and stimulating the proliferation of endothelial cells.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| ||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 248
ADC79854/c
ID ADC79854 standard; cDNA; 1129 BP.
XX
AC ADC79854;
XX
DT 01-JAN-2004 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; secreted polypeptide;
KW transmembrane polypeptide; tumour necrosis factor-alpha; TNF-alpha;
KW chondrocyte; tumour; cancer; adrenal; lung; colon; breast; prostate;
KW rectum; kidney; cervix; liver; microvascular endothelial cell;
KW glucose uptake modulator; FFA uptake modulator; cell proliferation;
KW cell differentiation; skeletal muscle cell; adipocyte cell;
KW pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;

KW rheumatoid arthritis; haemoglobin-associated disorder; thalassaemia;
KW immune system cell infiltration; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker; gene; ss.
XX
OS Homo sapiens.
XX
PN US2003087358-A1.
XX
PD 08-MAY-2003.
XX
PF 22-APR-2002; 2002US-00127833.
XX
PR 01-SEP-1998; 98US-0098750P.
PR 01-SEP-1999; 99WO-US020111.
PR 18-OCT-1999; 99US-00403297.
PR 18-FEB-2000; 2000WO-US004342.
PR 08-NOV-2000; 2000WO-US030952.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-801143/75.
DR P-PSDB; ADC79855.
XX
PT New PRO nucleic acid, useful for manufacturing a medicament for
PT diagnosing or treating tumor.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of
CC glucose or FFA (free fatty acid) by skeletal muscle cells or adipocyte
CC cells, for stimulating differentiation of adipocyte cells, for
CC stimulating proliferation of or gene expression in pericyte cells, for
CC stimulating the proliferation of inner ear utricular supporting cells or
CC T-lymphocyte cells, for inducing endothelial cell tube formation and for
CC treating various bone and/or cartilage disorders such as sports injuries
CC and arthritis. PRO polypeptides which stimulate the release of
CC proteoglycans from cartilage are useful for treating sports-related joint
CC problems, articular cartilage defects, osteoarthritis and rheumatoid
CC arthritis. PRO polypeptides are also useful for treating various
CC mammalian haemoglobin-associated disorders such as various thalassaemias
CC and conditions which may benefit from enhanced local immune system cell
CC infiltration. This sequence represents a human PRO polynucleotide of the
CC invention. Note: The sequence data for this patent is also available in
CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 249
ADD09323/c
ID ADD09323 standard; cDNA; 1129 BP.
XX
AC ADD09323;
XX
DT 01-JAN-2004 (first entry)
XX
DE Human PRO polynucleotide #111.
XX
KW Human; gene; ss; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; rectum; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;
KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassaemia;
KW immune system cell infiltration.
XX
OS Homo sapiens.
XX
PN US2003194775-A1.
XX
PD 16-OCT-2003.
XX
PF 28-MAY-2002; 2002US-00156848.
XX
PR 03-MAR-2000; 2000US-0187202P.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-852595/79.
DR P-PSDB; ADD09324.
XX
PT New secreted and transmembrane PRO nucleic acids and polypeptides, useful
PT for detecting a tumor, stimulating the release of tumor necrosis factor
PT alpha from blood and stimulating the release of proteoglycans from
PT cartilage.
XX
PS Claim 2; Fig 221; 637pp; English.
XX
CC The invention relates to isolated human PRO polypeptides (secreted and
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC invention also relates to an antibody which specifically binds to a PRO
CC polypeptide, a method for stimulating the release of tumour necrosis
CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
CC proliferation or differentiation of chondrocyte cells and a method for
CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
CC polynucleotides are useful in molecular biology, including uses as
CC hybridisation probes, in chromosome and gene mapping, in generating
CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
CC be used in preparing PRO polypeptides by recombinant techniques and in
CC generating either transgenic animals or knock-out animals which are
CC useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides or antibodies are used in preparing a
CC medicament for treating a condition responsive to the polypeptides or
CC antibodies, such as tumours, for stimulating and inhibiting proliferation
CC of human microvascular endothelial cells, for modulating the uptake of

CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating differentiation of adipocyte cells, for stimulating
CC proliferation of or gene expression in pericyte cells, for stimulating
CC the proliferation of inner ear utricular supporting cells or T-lymphocyte
CC cells, for inducing endothelial cell tube formation and for treating
CC various bone and/or cartilage disorders such as sports injuries and
CC arthritis. PRO polypeptides which stimulate the release of proteoglycans
CC from cartilage are useful for treating sports-related joint problems,
CC articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
CC polypeptides are also useful for treating various mammalian haemoglobin-
CC associated disorders such as various thalassaemias and conditions which
CC may benefit from enhanced local immune system cell infiltration. This
CC sequence represents a human PRO polynucleotide of the invention. Note:
CC The sequence data for this patent is also available in electronic format
CC from USPTO at seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

RESULT 250
ADD41036/c
ID ADD41036 standard; cDNA; 1129 BP.
XX
AC ADD41036;
XX
DT 15-JAN-2004 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO4327 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; gene; ss;
KW Tumour necrosis factor alpha release; TNF-alpha release;
KW glucose uptake modulator; FFA uptake modulator;
KW cell proliferation stimulator; cell differentiation stimulator;
KW cell differentiation inhibitor; cytokine release stimulator; tumour;
KW lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; chromosome mapping; gene mapping;
KW gene therapy; chromosome identification; chromosome marker.
XX
OS Homo sapiens.
XX
PN US2003203438-A1.
XX
PD 30-OCT-2003.
XX
PF 15-MAY-2002; 2002US-00146786.
XX
PR 24-NOV-1997; 97US-0066511P.
PR 16-SEP-1998; 98WO-US019330.
PR 25-AUG-1999; 99US-00380139.
PR 22-FEB-2000; 2000WO-US004414.
PR 01-DEC-2000; 2000WO-US032678.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-875645/81.
DR P-PSDB; ADD41037.
XX
PT New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO1114 or
PT PRO4978, useful in molecular biology, chromosome and gene mapping, in
PT generating antisense RNA and DNA, and in gene therapy.
XX
PS Claim 2; SEQ ID NO 221; 637pp; English.
XX
CC The invention describes 305 nucleic acids encoding PRO (secreted and
CC transmembrane) polypeptides (I). (I) is useful for stimulating the
CC release of TNF-alpha from human blood, for modulating the uptake of
CC glucose or FFA by skeletal muscle cells or adipocyte cells, for
CC stimulating the proliferation or differentiation of chondrocyte cells,
CC for stimulating the proliferation of or gene expression in pericyte
CC cells, for stimulating the release of proteoglycans from cartilage, for
CC stimulating the proliferation of inner ear utricular supporting cells,
CC for stimulating the proliferation of T-lymphocyte cells, for stimulating
CC the release of a cytokine from PBMC cells, for inhibiting the binding of
CC A-peptide to factor VIIA, for inhibiting the differentiation of adipocyte
CC cells, for stimulating proliferation of endothelial cells, for detecting
CC the presence of tumour in a mammal. The tumour is lung, colon, breast,
CC prostate, rectal, cervical or liver tumour. The oligonucleotide probes
CC are useful for isolating genomic and cDNA nucleotide sequences or
CC antisense probes. (I) is also useful as therapeutic agent. PRO is useful
CC in assays to identify other proteins or molecules involved in binding
CC interaction. A polynucleotide (II) encoding (I) is useful in chromosome
CC and gene mapping, in generation of antisense RNA and DNA, in the
CC preparation of PRO polypeptide, for generating transgenic animals or
CC knockout animals which in turn are useful in the development and
CC screening of therapeutically useful reagents, in gene therapy, for
CC chromosome identification, as chromosome marker, and for generating
CC probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. (I) and (II) are useful for tissue typing. This sequence encodes
CC a novel human secreted and transmembrane PRO polypeptide.
XX
SQ Sequence 1129 BP; 231 A; 369 C; 335 G; 194 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 1129;
Best Local Similarity 66.0%; Pred. No. 95;
Matches 31; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

Qy 2377 TTCTTAATTTTTTCATTTCCAGATTTCCTTCAGTTTGGGTTTTGTTT 2423
|| || |||||| ||| ||| | | ||| |||||||| ||
Db 1129 TTTTTTTTTTTTTTTTTTTCAGCTGGCACACAGGCTGGGTTTTTATT 1083

Search completed: August 5, 2004, 15:53:10
Job time : 1042 secs